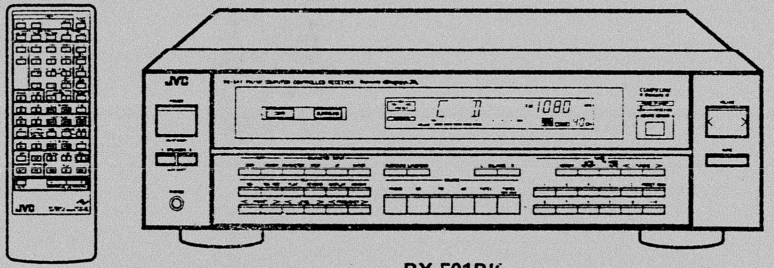
JVC

SERVICE MANUAL

COMPUTER CONTROLLED RECEIVER

RX-501BK
MODEL No. RX-501LBK



RX-501BK

Contents

Safety Precautions··········1-2
Instruction Book··········1-3
Block Diagrams··········1-15
Removal Procedures··········1-18
FM/AM Tuner Alignment Procedures··········1-19
Power Amplifier Idling Current Adjustment··········1-20
Internal Block Diagrams of ICs··········1-21
Internal Wiring of LCD··········1-30
Remote Control Unit (RM-SR501U)··········1-32
Schematic Diagrams··········Insertion
Printed Circuit Boards··········Insertion
Parts List··········Separate-Volume Insertion
Connection Diagram··········1-33

No.20077
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Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)

   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

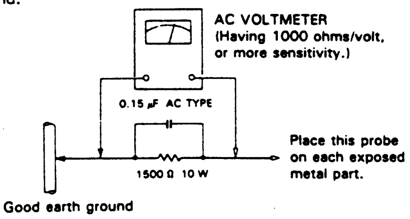
   Do not use a line isolation transformer during this check.

   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).
   - Alternate check method

     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.

     Measure the AC voltage across the resistor with the AC voltmeter.

     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).


AC VOLTMETER
(Having 1000 ohms/volt, or more sensitivity.)
0.15 μF AC TYPE
1500 Ω 10 W
Place this probe on each exposed metal part.
Good earth ground

Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

SPECIFICATIONS

AMPLIFIER SECTION

Output power : 65 watts per channel, min. RMS, both channels driven, into 8 ohms from 20 Hz to 20 kHz, with no more than 0.015% total harmonic distortion.
65 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz (DIN).
65 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.015% total harmonic distortion.

Total harmonic distortion : 0.015% at 65 watts (1 kHz 8 ohms)

Intermodulation distortion : 0.015% at 65 watts

Input sensitivity/impedance
- PHONO : 2.5mV/47 k ohms
- CD
TAPE 1 PLAY
TAPE 2/VIDEO
SOUND PLAY : 200mV/47 k ohms

Recording output level : 200mV

Frequency response
- PHONO (RIAA equalization) : 20Hz−20kHz,±0.5dB
- CD.
TAPE 1 PLAY
TAPE 2/VIDEO
SOUND PLAY : 10Hz−50kHz,± 1 dB

S.E.A. graphic equalizer
- Center frequencies : 63Hz, 160Hz, 400Hz, 1kHz, 2.5kHz, 6.3kHz, 16 kHz
- Control range : +10 dB ± 1 dB
  −10 dB ± 1 dB

Signal-to-noise ratio
- PHONO : 71 dB ('66 IHF) 78 dB ('78 IHF) (Rec out) 66 dB (DIN)
- CD, TAPE 1 PLAY TAPE 2/ VIDEO SOUND PLAY : 91 dB ('66 IHF) 85 dB ('78 IHF) 67 dB (DIN)

FM TUNER SECTION

	IHF	DIN (For Europe)
Tuning range	87.5 MHz−108.0 MHz	87.5 MHz−108.0 MHz
Usable sensitivity	Mono 10.8 dBf 0.95 μV/75 ohms 1.9 μV/300 ohms	—
26 dB quieting sensitivity		1.5 μV/75 ohms 3 μV/300 ohms
50 dB quieting sensitivity	Mono 16.3 dBf (1.8 μV/75 ohms 3.6 μV/300 ohms) Stereo 38.3 dBf (22.5 μV/75 ohms 45 μV/300 ohms)	—
S/N 46 dB stereo sensitivity	—	Stereo 23μV/75 ohms
Signal-to-noise ratio (at 98 MHz 85 dBf)	Mono 80dB Stereo 73 dB (IHF-A)	Mono 72 dB Stereo 64 dB (weighted)
Total harmonic distortion (1 kHz)	Mono 0.15 % Stereo 0.2 %	Mono 0.1% Stereo 0.3 %
Frequency response	30 Hz–15 kHz, + 0.5 dB. − 3 dB	
Capture ratio	1.5 dB	
Selectivity	60 dB ±400 kHz	55 dB ±300 kHz
IF response ratio	85 dB at 98 MHz	
Stereo separation	40 dB at 1 kHz	40 dB at 1 kHz

AM TUNER SECTION

EIA

MW

Tuning range

Area	Channel Space	
	9 kHz	10 kHz
U.S.A Canada	—	530 kHz - 1710 kHz
Continental Europe U.K.	522 kHz - 1629 kHz	—
Italy	522kHz - 1629 kHz	—
Australia	522 kHz - 1629 kHz	—
Other area	522 kHz - 1629 kHz	530 kHz - 1630 kHz

Sensitivity
- Loop antenna : 300μV/m*
- External antenna : 30 μV*

Signal-to-noise ratio : 50 dB* (100 mV/m)

Selectivity : 38 dB,±10 kHz
35 dB,± 9 kHz*

Image response ratio : 40 dB*

IF response ratio : 60 dB

Total harmonic distortion : 0.5 %* (100 mV/m)

LW (RX-501 LBK only)

Tuning range

Area	Channel Space
	1 kHz
Continental Europe U.K.	144 kHz~ 353 kHz
Italy	144 kHz~ 290 kHz

Sensitivity
- Loop antenna : 600 μV/m at 245 kHz
- External antenna : 100μV at 245 kHz

Signal to noise ratio (100 mV/m) : 50 dB at 245 kHz

Selectivity : 40 dB ± 9 kHz at 245 kHz

GENERAL

Dimensions (W x H x D) : 17-3/16" x 5" x 13" (435 x 127 x 330 mm)

Weight : 15 lbs (6.8 kg)

* Measured at 1,000 kHz or 999 kHz.

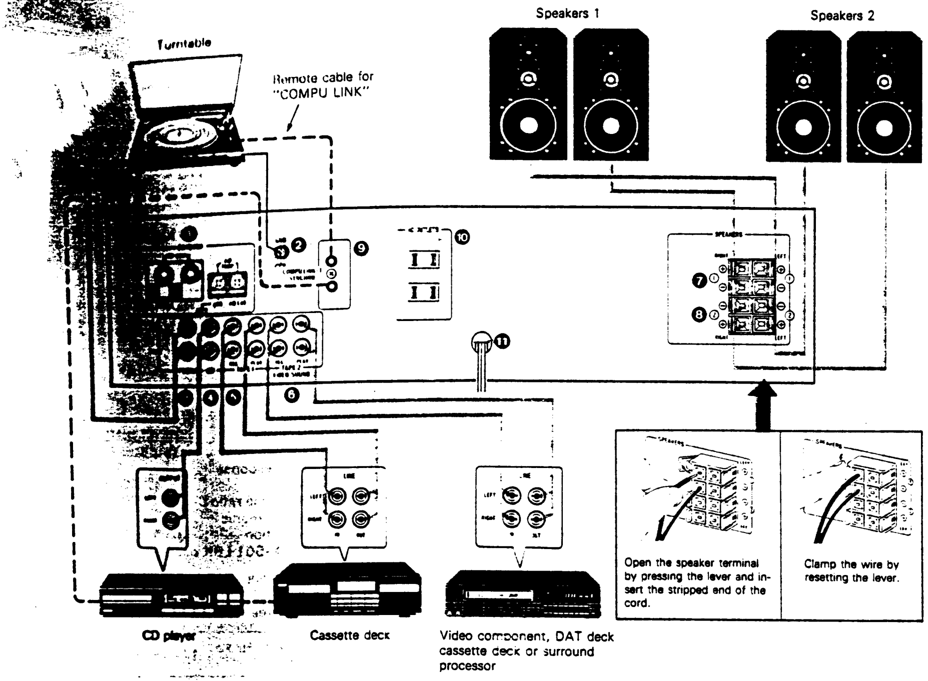
Design and specifications subject to change without notice.

POWER SPECIFICATIONS

Area	Line Voltage & Frequency	Power Consumption
U.S.A.	AC 120 V~, 60 Hz	270 w, 350 VA
Canada		
Continental Europe	AC 220 V~, 50 Hz	200 w
U.K.	AC 240 V~, 50 Hz	340 w
Australia		
Other Area	AC 110/120/220/240V~selectable, 50/60 Hz	200 w

CONNECTION DIAGRAM

Switch the power off when connecting any cables.


Speakers 1
Speakers 2
Turntable
Remote cable for
"COMPU LINK"
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
Open the speaker terminal by pressing the lever and insert the stripped end of the cord.
Clamp the wire by resetting the lever.
CD player
Cassette deck
Video component, DAT deck
cassette deck or surround
processor

① ANTENNA terminals
② GND terminal
③ PHONO terminals
④ CD terminals
⑤ TAPE 1 terminals
⑥ TAPE 2/VIDEO SOUND terminals
⑦ SPEAKERS 1 terminals
⑧ SPEAKERS 2 terminals
⑨ COMPU LINK-1/SYNCHRO terminals
Connect to JVC components provided with COMPU LINK-1/SYNCHRO terminals for the COMPU LINK control system function.
⑩ AC OUTLETS (UNSWITCHED: For RX-401BK)
(SWITCHED: For RX-501BK)
⑪ Power cord

Notes:
- When connecting components, connect their left and right channels correctly. If channels are reversed, the stereo effect will be degraded.
- Connect speakers with the correct polarity: (+) to (+) and (−) to (−). Reversed polarity will degrade the stereo effect. Be careful to prevent adjacent speaker wires from touching each other.
- Use speakers with the correct impedance. The correct impedance is indicated on the rear panel of the RX-401BK/RX-501BK.
- The AC OUTLETS do not supply power when the power switch is turned off (RX-501BK only). Do not connect equipment requiring more than the outlet's rated value.
- Do not connect the remote cable when connecting the JVC cassette deck having COMPU LINK-1/SYNCHRO terminals to be the TAPE2/VIDEO SOUND terminals.
- When a JVC DAT deck having COMPU LINK-1/SYNCHRO terminals is used, be sure to connect it to the TAPE2/VIDEO SOUND terminals and also connect the remote cable.
- Connect a turntables using a moving magnetic (MM) type cartridges to the PHONO terminals.

ANTENNAS

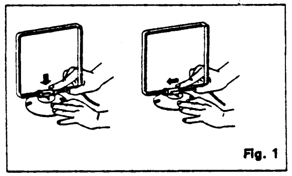


Fig. 1

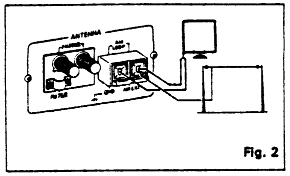


Fig. 2

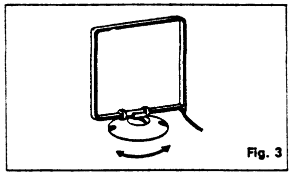


Fig. 3

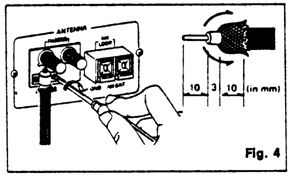


Fig. 4

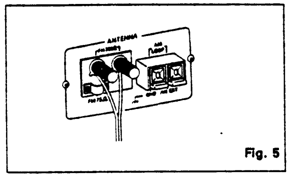


Fig. 5

AM antennas

Figure 1: How to fix the AM loop antenna

Figure 2: AM loop antenna

This antenna is for the reception of local AM broadcasts.

Figure 2: AM external antenna

If AM reception is unsatisfactory, connect an external AM antenna (single-wire antenna) to the AM ANTENNA terminal.

Figure 3: Noise and interference

Change the direction of the loop antenna, or re-install it in a better position if the reception is noisy.

Notes:
- If the provided loop antenna is not connected or an uninsulated antenna wire touches the rear panel, it will be impossible to receive AM broadcasts.
- When installing an external AM antenna, leave the AM loop antenna connected.

FM antennas

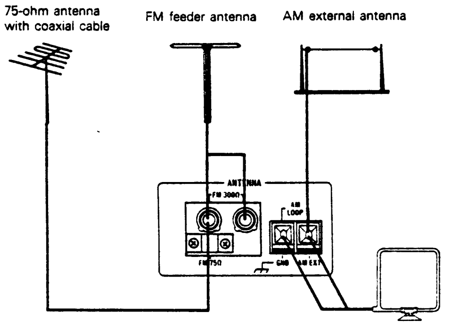
Figure 4: 75-ohm FM antenna with coaxial

Loosen the screws on the bracket and insert the cable through the ring from below. Connect the stripped core to the upper terminal then tighten the ring. The ring is the antenna ground.

Figure 5: FM Feeder antenna

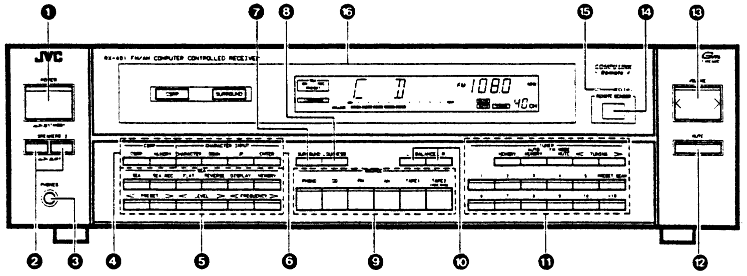
Connect to the 300-ohm terminal. Make sure the feeder antenna wires do not touch any other terminals.

Antenna Connections

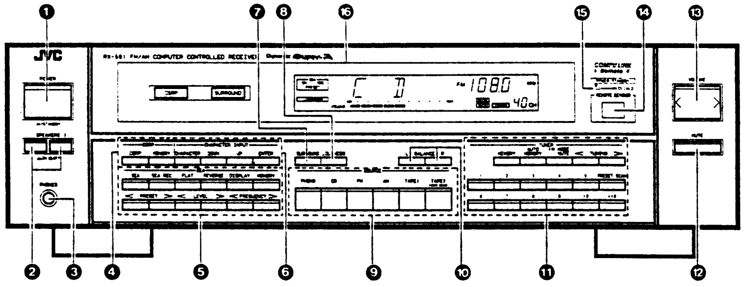

75-ohm antenna
with coaxial cable
FM feeder antenna
AM external antenna
ANTENNA
FM 300Ω
FM 75Ω
GND
AM LOOP
AM EXT
AM loop antenna

FRONT PANEL

RX-401BK



RX-501BK



① **POWER (ON/STANDBY)**
Turns the power ON or activates the STANDBY mode.

STANDBY mode:
Preset data is retained in memory while the power cord is plugged into an AC outlet. If a power failure occurs or the cord is unplugged, data is retained for two or three days before memory is cleared.

Note:
A small amount of power (2 watts) is consumed in the STANDBY mode. To switch the power off completely, unplug the power cord.

② **SPEAKERS 1, 2**
Turns speakers 1 and 2 ON or OFF.

③ **PHONES**
Plug headphones into this jack. If you want to hear from the headphones alone, turn OFF speakers 1 and 2.

④ **CSRP**
COMPU LINK SOURCE RELATED PRESET SYSTEM feature (CSRP)

CSRP:	Turns the CSRP feature ON or OFF.
MEMORY:	Stores CSRP data in memory.

⑤ **SEA**
Use the following keys for the S.E.A. Graphic Equalizer:

SEA:	Turns the S.E.A. ON or OFF.
SEA REC:	Turns S.E.A. recording ON or OFF.
FLAT:	Flattens S.E.A. characteristics.
REVERSE:	Reverses polarity of the S.E.A. characteristics.
DISPLAY:	Displays S.E.A. patterns on the screen.
MEMORY:	Stores an S.E.A. pattern in memory.
PRESET <,>:	Calls an S.E.A. preset pattern.
LEVEL <,>:	Set an S.E.A. level.
FREQUENCY <,>:	Calls a frequency band to correct.

⑥ **CHARACTER INPUT**
Use the following keys to assign titles or other data to the S.E.A. patterns or to TUNER channels you have preset:

CHARACTER:	Sets the CHARACTER INPUT mode.
DOWN, UP:	Press to select characters (letters, numerals, and symbols).
ENTER:	Store created titles in memory.

⑦ **SURROUND**
Turns the surround sound effect ON or OFF.

⑧ **LOUDNESS**
Turns LOUDNESS ON or OFF. For use when a more powerful bass is desired with low volume.

⑨ **SOURCE**
Use the following keys to select sources:

PHONO:	Press to listen to records.
CD:	Press to listen to CDs.
FM:	Press to listen to FM broadcasts.
AM:	Press to listen to AM broadcasts.
TAPE 1:	Press to operate the tape deck connected to the TAPE1 terminals.
TAPE 2/VIDEO SOUND:	Press to operate the tape deck or video equipment connected to the TAPE2/VIDEO SOUND terminals. (alternates between ON and OFF)

⑩ **BALANCE L, R**
Adjusts the volume balance between the left and right speakers.

⑪ **TUNER**
Use the following keys to listen to AM or FM broadcasts:

MEMORY:	Stores an AM or FM frequency (station) on a preset channel.
AUTO MEMORY:	Stores an AM or FM frequency on a preset channel using the AUTO MEMORY feature.
FM MODE/MUTE:	Selects FM reception modes.
TUNING <,>:	Tunes in an AM or FM frequency.
1–10, +10 (Tuner numeric keys):	Press to select preset channels.
PRESET SCAN:	Press to scan preset channels in sequence.

⑫ **MUTE**
Turns sound ON or OFF temporarily.

⑬ **VOLUME <, >**
Adjusts the volume of sound from the speakers or headphones.

⑭ **REMOTE SENSOR**
Receives signals from the remote control unit.

⑮ **RECEIVED indicator (RX-401BK)**
Lights when signals are received from the remote control unit.
RECEIVED and POWER STANDBY indicator (RX-501BK)
Lights when signals are received from the remote control unit or when the machine is in the STANDBY mode.

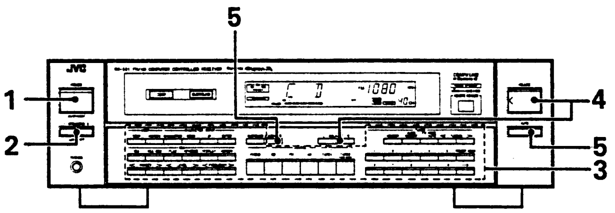
⑯ **Display and indicator**
Shows the operating status and the connected COMPU LINK equipment.

OPERATION

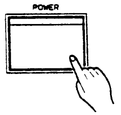
— Before Operating —

Before plugging the power cord into an AC outlet, check to be sure the individual components are connected correctly.

■Basic operating procedures:

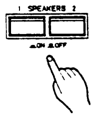


1. Turn the POWER switch to ON.



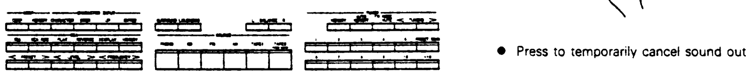
Note:
If a malfunction occurs when the power is ON, unplug the power cord and then plug it in again.

2. Select a speaker system by pressing one of the SPEAKERS keys.

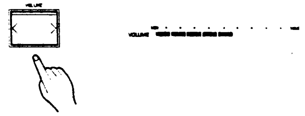


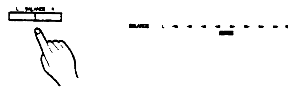
Note:
If speakers are not connected to both SPEAKERS 1 and 2 terminals, do not turn ON both speaker systems as that would suppress sound output.

3. Operate these keys, as needed, by following the directions given further on.



4. Adjust the VOLUME and BALANCE keys to your taste.

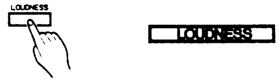




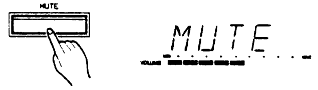
Note:
These keys vary their settings while they are being pressed. The display normally shows VOLUME. It will change to BALANCE for about 5 seconds when the BALANCE keys are pressed.

5. Press the LOUDNESS and MUTE keys as needed.

- Press to obtain powerful bass with a low sound volume.

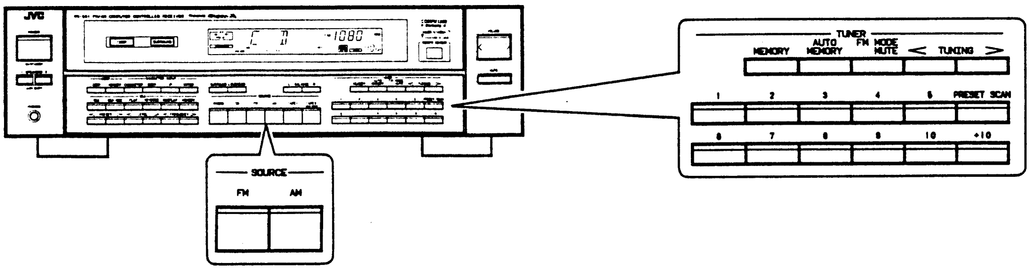


- Press to temporarily cancel sound output.



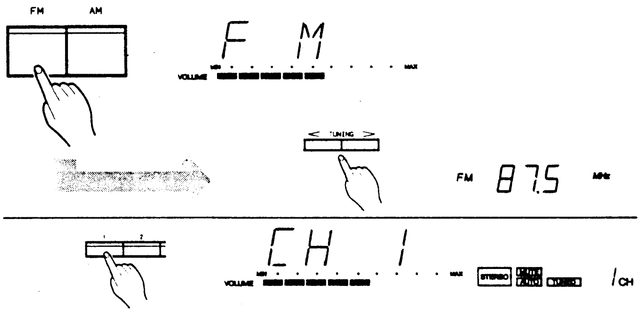
Note:
The MUTE key is reset when the VOLUME or BALANCE keys are pressed.

■Listening to AM or FM Broadcasts



Press the AM or FM key and the TUNING keys to select a station, or press numeric keys to select a preset channel. (See "Presetting Stations")

<If you select FM.>



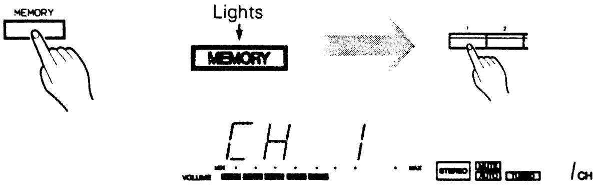
- The TUNED indicator will light when a station is tuned in correctly. Adjust the antenna if the indicator does not light.
- While tuning in an FM station, press the MODE/MUTE key to light the MUTE/AUTO indicator. This cuts out interstation noise while tuning. The STEREO indicator will light when an FM stereo station is tuned in correctly. If the FM stereo station is weak and noisy, press the MODE/MUTE key again to turn off the MUTE/AUTO indicator to improve reception (broadcast becomes monaural).

Note:
To select a station with the TUNING keys, press the FM or AM key first. Each time the TUNING keys are pressed, the frequency is varied in steps of 10 kHz for AM and 100 kHz for FM. The setting will vary continuously while the keys are pressed and held. Auto-tuning starts when the keys are released and stops when a station is tuned. To halt auto-tuning, press a TUNING key.

— Presetting Stations —

You can preset a total of 40 AM and FM stations (CH1 through CH40).

1. Tune in the desired station with the TUNING keys.
2. Press the MEMORY key to light its indicator. Enter the channel number with numeric keys while the indicator is on (for about 5 seconds).



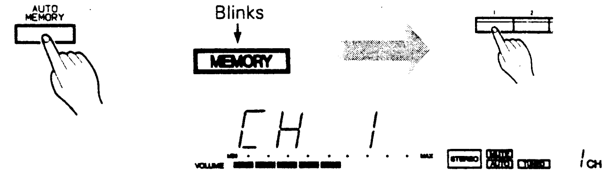
Note:
If the indicator turns off before you enter the channel number, press the MEMORY key again.

3. Repeat this procedure to preset other channels.

Auto-memory

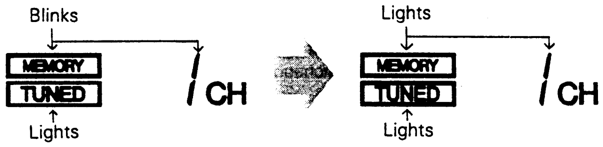
The auto-memory feature scans frequencies upward and presets stations as they are tuned, in ascending channel number order.

1. Using the TUNING keys, select the frequency from which you want auto-memory to start (the lower-limit frequency).
2. Press the AUTO MEMORY key to blink its indicator. Enter the starting channel number with the numeric keys while the indicator is blinking (about 5 seconds).



Note:
If the indicator stops blinking before you enter the channel number, press the AUTO MEMORY key again.

3. The auto-memory feature starts scanning frequencies upward. The TUNED indicator will light when a station is tuned, with the channel number blinking (for about 5 seconds). The presetting is complete when the blinking MEMORY indicator and channel number become continuously lit. This continues until the upper-limit frequency is reached or all 40 channels are filled.



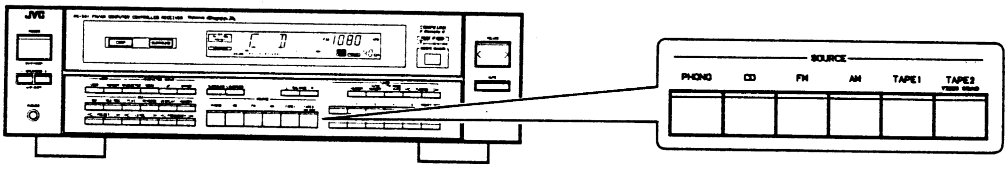
Note:
If you do not want to preset a station, resume scanning by pressing the AUTO MEMORY key while the channel number is blinking. To halt the auto-memory feature, press any TUNER key other than the AUTO MEMORY key.

Using Numeric Keys
To indicate numbers 1 through 10, simply press the appropriate keys. To indicate numbers over 10, press the appropriate combination of keys.
Examples:
To indicate 17, press "+10", then "7".
To indicate 20, press "+10", then "10".
To indicate 26, press "+10" twice, then "6".
To indicate 40, press "+10" three times, then "10".

PRESET SCAN

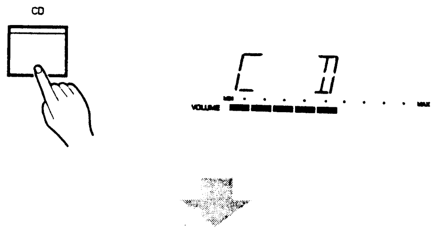
The PRESET SCAN key is convenient for locating desired channels. When this key is pressed, the preset channels are scanned upward in sequence. Each channel is received for about 4 seconds while the corresponding channel number blinks. When the desired channel is located, press the PRESET SCAN key again to stop scanning. Scanning ends when one cycle of 40 channels is completed. The receiver returns to the station tuned in prior to the start of scanning.

■Playing Back Sources (PHONO, CD, TAPE1, TAPE2/VIDEO SOUND)



Press the SOURCE key for the desired source, and operate the corresponding equipment.

<If you select CD>



CD player can be operated.

- Pressing the TAPE2/VIDEO SOUND key will not change the display source indication, but the TAPE2 MONITOR lights. To play another source, press the TAPE2/VIDEO SOUND key again to turn off the indicator.

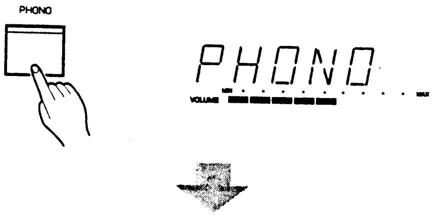
Note:
To operate other source equipment, refer to the appropriate instructions.

■Recording

For recording, use the SOURCE keys as in "Playing Back Sources".

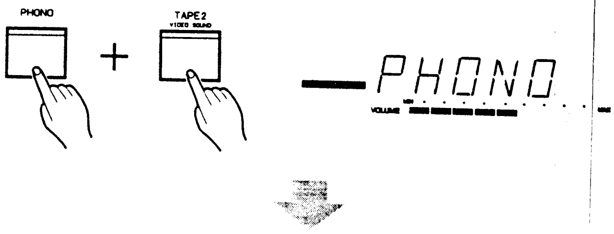
Press the SOURCE key for the desired source, and operate the corresponding source equipment and tape deck.

<If you select PHONO.>



Turntable and tape deck can be operated.

To monitor the recording by a three-head tape deck, connect the three-head tape deck to the TAPE2/VIDEO SOUND terminals beforehand. Press the appropriate SOURCE key and the TAPE2/VIDEO SOUND key, and operate the source equipment and three-head tape deck.



Turntable and three-head tape deck can be operated.

Note:
Set the recording level from the tape deck. It can not be set with the VOL control of this machine.

— Dubbing Tapes —

Connect one tape deck to the TAPE1 terminals, the other tape deck to the TAPE2/VIDEO SOUND terminals.

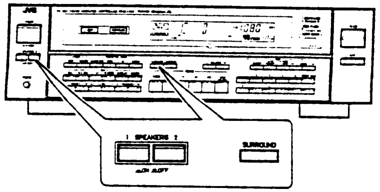
<To record from TAPE1 to TAPE2/VIDEO SOUND>

1. Press TAPE1.
2. Play back the TAPE1 deck and record with the TAPE2/VIDEO SOUND deck.

<To record from TAPE2/VIDEO SOUND to TAPE1>

1. Press the TAPE2/VIDEO SOUND key and a SOURCE key other than TAPE1.
2. Play back the TAPE2/VIDEO SOUND deck and record with the TAPE1 deck.

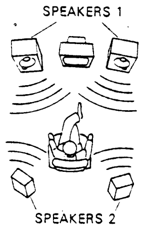
■Playing Back with a Surround-sound Effect.

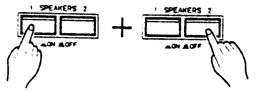


Playing back a stereo source with the SURROUND key ON will produce a surrounding sound effect.

1. Connect speaker systems to the SPEAKERS 1 and 2 terminals and turn ON the SPEAKERS keys, 1 and 2.

<Speaker layout example>





Note:
A single speaker system can produce a surrounding sound effect by itself, but the use of two speaker systems is recommended for a more ideal surrounding sound effect.
If a speaker system with a low-rated input is connected to SPEAKERS2, avoid using it independent of SPEAKERS1, and pay attention to its VOLUME control during surrounding sound playback.

2. Press the SURROUND key to play back the source.

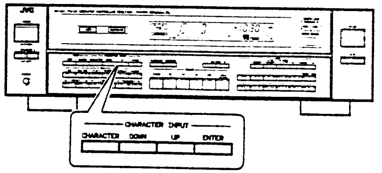
SURROUND
SURROUND

Stereo source plays back.

Note:
The surround sound is recorded as a normal stereo sound even if it is recorded with the SURROUND key ON. Monaural sources cannot be played back with the surround sound effect.

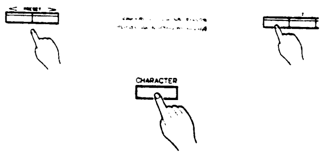
■Entering Characters

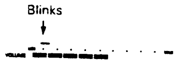
A four-character title or station name can be assigned to each S.E.A. preset pattern (SEA A to E) or TUNER preset channel (CH 1 to 20).



1. Specify a S.E.A. manual preset pattern (SEA A through E using the keys PRESET <and>), or a TUNER preset channel (using the numeric keys). Press the CHARACTER key.

<To specify a S.E.A. pattern>	<To specify a Tuner Preset Channel>
Use the S.E.A. PRESET keys, <and>.	Use the numeric keys.



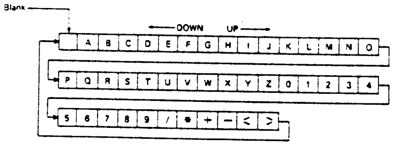


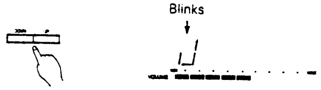
The cursor at the left blinks.
If a character has already been entered, the character blinks.

Note:
For details on S.E.A., see "Using the S.E.A. Graphic Equalizer."
When a preset S.E.A. pattern has been called, press the CHARACTER key while the pattern is displayed (about 3 seconds). If the display is cleared before you press the CHARACTER key, press either PRESET key.

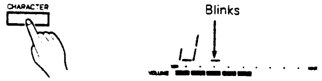
2. Select the appropriate characters with the UP and DOWN keys.

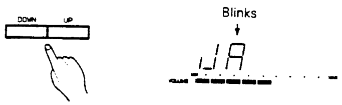
Alphanumeric character order.


Blank
DOWN
UP
A B C D E F G H I J K L M N O
P Q R S T U V W X Y Z 0 1 2 3 4
5 6 7 8 9 / * + – < >



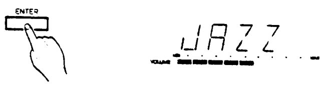
3. Press the CHARACTER key to move to the next position.
Repeat steps 2 and 3 to enter up to 4 characters.





- To alter the characters, move the blinking cursor to the desired character for correction using the CHARACTER key.

4. When the entry is complete, press the ENTER key to store it in memory.



USING THE S.E.A. GRAPHIC EQUALIZER

The S.E.A. Graphic Equalizer breaks down the audible frequency range into seven bands. Each band of tones can then be adjusted as desired by the listener (±10dB in steps of 2 dB on the basis of 0dB). You can customize the sound to your taste or ideally correct subtle frequencies to suit the acoustic characteristics of your listening room or conditions of audio equipment.

Frequency band responses

63 Hz: Raise to emphasize the very low base response of organs, drums, and contrabass. When used for emphasis, it produces stable and solid sound; when de-emphasized, eliminates unclear response at low frequencies.

160 Hz: Empahsize to obtain a more expanded low sound. De-emphasize to eliminate unclear sound caused by large or nearly empty listening rooms.

400 Hz: This frequency range is the base on which music is constructed. Emphasize to put real punch in your music.

1 kHz: Most effective in emphasizing or de-emphasizing the human voice. Emphasize to cause the vocalist to be brought to the foreground, or de-emphasized to fade into the background.

2.5 kHz: The human hearing is most sensitive to this frequency. If the music sounds hard or metallic, de-emphasize it.

6.3 kHz: Boost to add clarity to winds and strings. This frequency band varies the tonal expression, influencing the subtleties of the music.

16 kHz: Boosting this frequency range suitably adds to the delicacy of highs, with cymbals and triangles resounding in a more ear-pleasing manner, and provides a feeling of extension. This frequency band can also be used to compensate for cartridge response since most moving-magnet cartridges have resonance peaks in the frequency range from 10 kHz to 20 kHz.

S.E.A. preset patterns

A total of 10 preset patterns can be used: 5 programmed preset patterns, and 5 manual patterns which you create (SEA A through E).

– Program pattern features –

These five S.E.A. patterns were preset at the factory to offer suggested settings for various types of audio programs. Each preset pattern is shown below. After recalling these patterns, you can further change each frequency band to suit yourself. However, since they are representative patterns, the original, stored pattern will be unchanged.

HEAVY:
Used for music with a heavy beat, such as rock music. Low frequencies are emphasized to produce a deeper, more powerful sound. Higher frequencies are also emphasized to enhance and bring clarity to the highs, including the percussive notes.

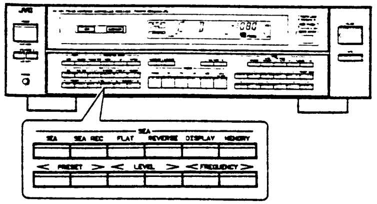
CLEAR:
For crisp, clear sound with transparent highs. The low and middle frequencies that tend to be unclear are de-emphasized, and the middle and high frequencies that strengthen the vocal component of the music are emphasized.

SOFT:
For background music. The very low frequencies, which need boosting at low volume levels, are mephasized, and the stimulating effect of higher frequencies is diminished by de-emphasizing high frequencies.

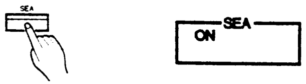
MOVIE:
For TV, VCR, and videodisc sound. The low and high frequencies, which are usually of insufficient strength in the sound of these sources, are empahsized to produce a balanced, deeper sound. Also, the excessive brightness that is characteristic of these sources' sound is cut back by de-emphasizing the middle frequency band.

VOCAL:
For music that is chiefly vocal, or speech. The middle frequencies, which carry the human voice, are emphasized, while surrounding frequencies are reduced. To accent the higher vocal notes, the highest frequencies are also boosted.

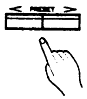
S.E.A. Operation



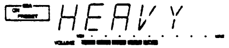
1. Press the SEA key.



2. Call a preset pattern with the PRESET keys. (Bypass this operation if not using a preset pattern.)



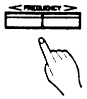
The PRESET indicator lights
when a preset pattern has been called.

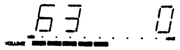


Order
< PRESET >
"SEA" – [SEA-A] – [SEA-B] – [SEA-C] – [SEA-D]
[SEA-E] – [HEAVY] – [CLEAR]
[SOFT] – [MOVIE] – [VOCAL]

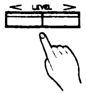
3. Press the FREQUENCY keys to call the desired frequency, and correct it with the LEVEL keys. (Bypass this operation if you are not changing the preset pattern called in step 2.)

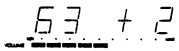
Repeat this operation for each additional frequency desired.





Order
< FREQUENCY >
[63Hz] – [160Hz] – [400Hz] – [1kHz]
[2.5kHz] – [6.3kHz] – [16kHz]



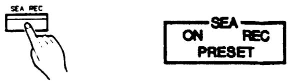


Order
< LEVEL >
[–10dB] – [–8dB] – [–6dB] – [–4dB] – [–2dB] – [0dB]
[+2dB] – [+4dB] – [+6dB] – [+8dB] – [+10dB]

Note:
When a frequency has been called, press the LEVEL keys while the frequency is displayed (about 3 seconds). If the display is cleared before you press the LEVEL keys, it can be recalled by pressing either FREQUENCY key.

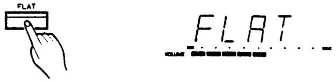
4. Press the SEA REC, FLAT, REVERSE, and DISPLAY keys as needed.

- Press the SEA REC key to record the sound corrected by S.E.A. on the tape deck connected to the TAPE1 terminals.



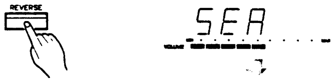
S.E.A. recording is not available with the tape deck connected to the TAPE2/VIDEO SOUND terminals. The SEA REC key is not functional when the SEA key is OFF, or when TAPE1 is the source.

- Press the FLAT key to flatten the S.E.A. characteristics.



Pressing the FLAT key while a pattern is yet to be preset will clear it. Be careful not to press the FLAT key inadvertently.

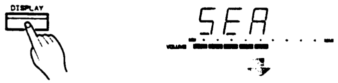
- Press the REVERSE key to reverse the polarity of S.E.A. characteristics. Press again to return to the original polarity.



The S.E.A. pattern is displayed in ascending frequency after this display.

Pressing the REVERSE key while a frequency is displayed reverse its polarity, but the display stops and return to the original source indication.

- Press the DISPLAY key to display the current S.E.A. pattern in ascending frequency.



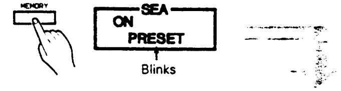
The S.E.A. pattern is displayed in ascending frequency order after this display (for a preset pattern, its title).

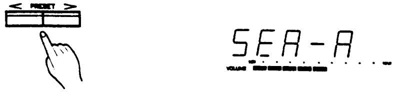
To stop the display, press DISPLAY again.

– Presetting Manual Patterns –

Up to 5 of the S.E.A. patterns (SEA A through E) can be preset.

1. Create an S.E.A. pattern to preset as instructed in "Operation".
2. Press MEMORY key to blink its indicator. Call one of the patterns (SEA A through E) by pressing the PRESET keys while the indicator is blinking (about 5 seconds).

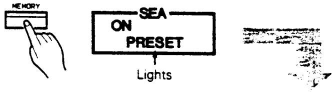


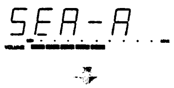


Order < PRESET >
[SEA-A]–[SEA-B]–[SEA-C]–[SEA-D]–[SEA-E]

Note:
Press the MEMORY key again if the indicator stops blinking before you press the PRESET keys.

3. Press the MEMORY key again while the indicator is blinking (about 5 seconds). The presetting is complete when the blinking MEMORY indicator becomes continuously lit. The preset pattern displays in ascending frequency.





Patterns are displayed in ascending frequency after this display

Preset Pattern Frequency Responses (Unit: dB)

Frequency band / Preset pattern	63Hz	160Hz	400Hz	1kHz	2.5kHz	6.3kHz	16kHz
HEAVY	+10	+2	−2	0	0	+2	+4
CLEAR	+4	−4	0	+4	+2	+4	+6
SOFT	+2	0	0	0	0	−2	−6
MOVIE	+6	+2	0	0	−2	0	+2
VOCAL	−2	−2	+2	+4	+2	0	+2
SEA-A							
SEA-B							
SEA-C							
SEA-D							
SEA-E							

Note: To assign titles to the preset patterns, see "Entering Characters".

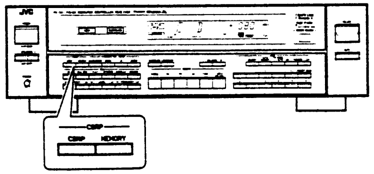
RUNNING THE CSRP (COMPU LINK SOURCE RELATED PRESET SYSTEM) FEATURE.

CSRP is the state-of-the-art electronic feature that presets volume, balance, and other control settings. This was previously done manually each time a different source was played back. This feature lets you invoke preset control settings by simply pressing the SOURCE keys without repeating many settings each time sources are changed.

The following controls can be preset on each SOURCE key (except TAPE2/VIDEO SOUND):

- •VOLUME
- •BALANCE
- •SEA ON/OFF
- •S.E.A. preset pattern
- •LOUDNESS ON/OFF
- •SURROUND ON/OFF

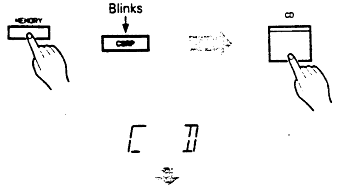
Operation



- Before proceding, set the preset state.

1. Press the MEMORY key to blink its indicator. Press the SOURCE key for the source to be preset (PHONO, CD, FM, AM, or TAPE1) while the indicator is blinking (about 5 seconds).

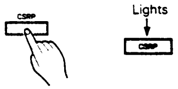
Repeat this operation for each additional source to be preset.



When the presetting is complete, the display will show preset data in the following order with the indicator blinking rapidly:
VOLUME, LOUDNESS ON/OFF, SURROUND ON/OFF→BALANCE→SEA ON/OFF→S.E.A. preset pattern.

Note:
Press the MEMORY key again if the indicator stops blinking before you press a SOURCE key.
Sources can be preset regardless of whether the CSRP key is ON or OFF, but when a source is to be preset with the CSRP key OFF, do not turn it ON until the presetting is complete. If the CSRP key were turned ON before the presetting is complete, the current data settings would be recalled to override the presetting in progress.
Even with the SEA key ON, the SEA PRESET indicator will blink when the MEMORY key is pressed if an S.E.A. preset pattern has not been previously selected. In this case, select an S.E.A. preset pattern and retry this operation.
Sources cannot be preset on the TAPE2/VIDEO SOUND key.

2. With the CSRP key ON, data settings on each corresponding SOU key recall preset by selecting the source.



- When the CSRP key is turned ON or when the power is switched on the CSRP key ON, the display will show the data settings on the curre selected SOURCE key in sequence with the indicator blinking rapidly. blinking indicator changes to a continuously lit state when the displa complete. Subsequently, a similar display occurs each time an additi source is selected.

Note:
Though data settings as recalled can be changed with control keys as us preset data cannot be altered. To alter preset data, perform the opera described in 1.

COMPU LINK REMOTE CONTROL SYSTEM

JVC's exclusive "COMPU LINK" remote control system connects equipment with JVC COMPU LINK-1/SYNCHRO terminals to the remote control system. The equipment can be controlled from the remote control unit, or other functions (such as automatic source selection and synchronized recording) can be used.

■Equipment remote control

JVC Compu Link equipment functions that can be controlled remotely include:

CD player	: PLAY, STOP, AUTO SEARCH, TRACK NO., SELECT
CD auto-changer	: PLAY MODE (CONTINUE, PROGRAM, MAGAZINE PROGRAM), DISC NO. SELECT, TRACK NO. SELECT
Cassette deck	: PLAY, STOP, MUSIC SCAN, DIRECTION, FAST FORWARD, REWIND, PAUSE, RECORD
DAT deck	: PLAY, STOP, AUTO SEARCH, PROGRAM NO. SELECT, FAST FORWARD, REWIND, PAUSE, RECORD
Turntable	: START, STOP

In addition, JVC's audio-visual equipment (such as VCRs, TVs, and surround processors) can also be controlled remotely. For further details, see the remote control unit description in this manual.

■Automatic source selection

Pressing SOURCE keys will automatically put the corresponding source equipment into the PLAY mode. When the PLAY key on source equipment is pressed, the corresponding SOURCE key is automatically set to that source. Other source equipment shuts down about 5 seconds later.

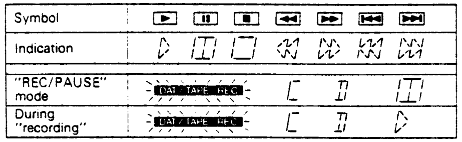
Note:
Automatic source selection does not work on the DAT deck connected to the TAPE2/VIDEO SOUND terminals.

■Synchronized recording

Synchronized recording permits a tape deck to start recording automatically in synchronism with a CD player or turntable. Set the tape deck in the REC/PAUSE mode and press the PLAY key on the CD player or turntable. The tape deck will enter the recording mode automatically, starting synchronized recording.
Synchronized recording stops automatically after the CD player or turntable has stopped and the tape deck has entered the REC/MUTE mode for about 4 seconds.

Notes:
- To set the REC/PAUSE mode, press the REC and the PAUSE key at the same time. Synchronized recording is disabled if the PAUSE key is pressed after the REC and the PLAY key are pressed simultaneously. For details, refer to the tape deck manual.
- If the power for any connected equipment is shut off during synchronized recording, the system will not operate properly. In this cast, you must start all over again.
- During synchronized recording the SOURCE key will lock in either the CD or PHONO position. This is to prevent you from accidentally stopping the recording or changing to any other source. To change to another source you must first stop synchronized recording. When using synchronized recording with a DAT deck, the SOURCE key is not locked.
- You cannot switch the CSRP ON and OFF during synchronized recording.
- If you connect a cassette deck to the TAPE2/VIDEO SOUND terminals, disconnect the remote control cable and do not use synchronized recording.
- If you program track numbers on a CD player or CD auto-changer and use synchronized recording, a blank space about 4 seconds long will be left between recordings. This permits music scanning.

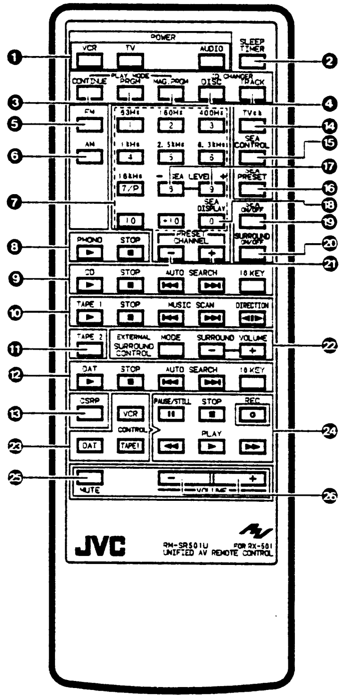
Display examples
When using the remote control unit to operarte equipment which has the COMPU LINK-1/SYNCHRO terminals, the name of the source and the operating mode will appear on the display.



Symbol	▶	❚❚	■	◀◀	▶▶	⏮	⏭
Indication							
"REC/PAUSE" mode	DAT / TAPE REC						
During "recording"	DAT / TAPE REC						

REMOTE CONTROL UNIT (RM-SR401U/RM-SR501U)

RM-SR501U


POWER
VCR
TV
AUDIO
SLEEP TIMER
CONTINUE
PLAY MODE PRGM
MAG PRGM
CD CHANGER DISC
TRACK
FM
AM
63Hz 1
160Hz 2
400Hz 3
TV ch
1kHz 4
2.5kHz 5
6.3kHz 6
SEA CONTROL
16kHz 7/P
SEA LEVEL
SEA PRESET
SEA DISPLAY
10
+10
0
PRESET CHANNEL
SURROUND ON/OFF
PHONO
STOP
CD
AUTO SEARCH
10 KEY
TAPE 1
MUSIC SCAN
DIRECTION
TAPE 2
EXTERNAL SURROUND CONTROL
MODE
SURROUND VOLUME
DAT
CSRP
VCR
CONTROL
PAUSE/STILL
REC
PLAY
TAPE1
MUTE
VOLUME
JVC
RM-SR501U FOR RX-501 UNIFIED AV REMOTE CONTROL
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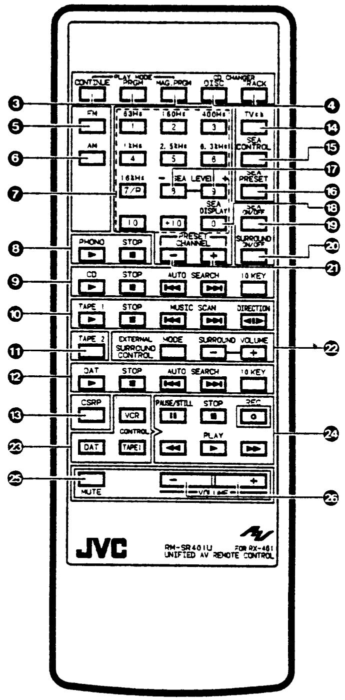
RM-SR401U


CONTINUE
PLAY MODE PRGM
MAG PRGM
CD CHANGER DISC
TRACK
FM
AM
63Hz 1
160Hz 2
400Hz 3
TV ch
1kHz 4
2.5kHz 5
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16kHz 7/P
SEA LEVEL
SEA PRESET
SEA DISPLAY
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+10
0
PRESET CHANNEL
SURROUND ON/OFF
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MODE
SURROUND VOLUME
DAT
CSRP
VCR
CONTROL
PAUSE/STILL
REC
PLAY
TAPE1
MUTE
VOLUME
JVC
RM-SR401U FOR RX-401 UNIFIED AV REMOTE CONTROL
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❶ **POWER (RM-SR501U only)**

AUDIO:	Press to change the power for the RX-501BK to ON or STANDBY.
TV:	Press to change the TV power to ON or OFF.
VCR:	Press to change the VCR power to ON or OFF.

❷ **SLEEP TIMER (RM-SR501U only)**
Use this control when you want to set the SLEEP TIMER.

❸ **PLAY MODE**
Use these keys when operating a CD auto-changer:

CONTINUE:	Play CDs in sequence.
PRGM:	Play a CD in a programmed sequence.
MAG. PRGM:	Play a magazine program.

❹ **CD CHANGER**

DISC:	Press to set numeric keys in the CD autochanger disc number mode.
TRACK:	Press to set numeric keys in the CD autochanger track number mode.

❺ **FM**
Press to listen to FM broadcasts.

❻ **AM**
Press to listen to AM broadcasts.

❼ **Numeric keys ([0], [1] through [10], [+10])**
Use to select the following numbers:
- FM/AM preset channel numbers
- CD auto-changer disc and track numbers
- CD player track numbers
- DAT deck tune numbers
- TV channel numbers

63 Hz — 16 kHz: Frequency is displayed when S.E.A. is used.

❽ **PHONO**

PHONO (▶):	Use to change the source to PHONO and start playing a record.
STOP (■):	Use to stop playing a record.

❾ **CD**

CD (▶):	Use to change the source to CD and start playing a CD.
STOP (■):	Use to stop playing a CD.
AUTO SEARCH:	
(⏮):	Use to go to the beginning of the previous track.
(⏭):	Use to go to the beginning of the next track.
10 KEY:	Press to set numeric keys in the CD player track number mode.

⑩ **TAPE1**

TAPE1 (▶): Use to change the source to TAPE1 and begin playing back a cassette deck tape.
STOP (■): Use to stop the cassette deck.
MUSIC SCAN:
(⏮): Use to go to the beginning of the previous tune.
(⏭): Use to go to the beginning of the next tune.
DIRECTION (⇆): Use to change the director of the tape.

⑪ **TAPE2**

Press when you want to play back or monitor the recording on a tape deck connected to the TAPE2/VIDEO SOUND terminals, or when you want to play back a tape on video equipment. Pressing this key turns the equipment ON or OFF.

⑫ **DAT**

DAT (▶): Use to play back a DAT deck tape.
STOP (■): Use to stop the DAT deck.
AUTO SEARCH:
(⏮): Use to go to the beginning of the previous tune.
(⏭): Use to go to the beginning of the next tune.
10 KEY: Press to set numeric keys in the DAT deck tune number mode.

⑬ **CSRP**

Turns CSRP ON or OFF.

⑭ **TV ch**

Use the numeric keys to select TV channel modes.

⑮ **SEA CONTROL**

Press to operate S.E.A. Use the numeric keys to control the S.E.A. operation modes.

⑯ **SEA PRESET**

Use to select S.E.A. preset patterns.

⑰ **SEA LEVEL (– 8 , + 9)**

Use to set the S.E.A. frequency level.

⑱ **SEA DISPLAY**

Use to display the S.E.A. setting.

⑲ **SEA ON/OFF**

Turns the S.E.A. feature ON or OFF.

⑳ **SURROUND ON/OFF**

Turns the SURROUND effect ON or OFF.

㉑ **PRESET CHANNEL (– , +)**

Increments (+) or decrements (–) the AM/FM preset channel or the TV channel numbers.

㉒ **EXTERNAL SURROUND CONTROL**

Operates the surround processor (optional).
MODE: Press to select the SURROUND mode.
SURROUND VOLUME: Adjusts the volume of the surround processor.

㉓ **CONTROL**

VCR: Press to run a VCR.
DAT: Press to run a DAT deck.
TAPE1: Press to run the TAPE1 cassette deck.

㉔ **VCR/DAT/TAPE1 controls**

These keys operate the equipment selected with the CONTROL key.
PAUSE/STILL (⏸): Stops play back, sound recording, and video recording temporarily. Press the PLAY key to release this control.
STOP (■): Stops the operation selected.
REC (●): Starts sound and video recording when pressed together with the PLAY key. When pressed together with the PAUSE/STILL key, sound and video recording are placed in standby.
(◀◀): Fast rewinds the tape in a cassette deck to the left. Rewinds a DAT deck and VCR tapes.
PLAY (▶): Plays the tape.
(▶▶): Fast winds the tape in a cassette deck to the right. Fast forwards DAT deck and VCR tapes.

㉕ **MUTE**

Press ON to turn off the sound from the speakers or headphones temporarily. Press OFF to hear the sound again.

㉖ **VOLUME (–, +)**

Use to adjust the volume of sound from the speakers or headphones.

■Inserting Batteries in the Remote Control Unit

The RM-SR401U and RM-SR501U remote control units require two size AA (1.5 V) batteries.

Figure 1:
Remove the rear cover of the remote control unit.

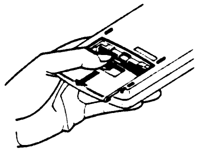


Figure 2:
Insert the batteries.

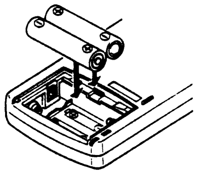
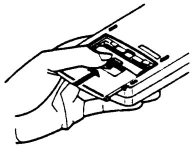


Figure 3:
Re-attach the rear cover in the original position.



Important Notes About Batteries

- If the range of the remote control unit seems shortened, the batteries may be old. Try inserting new batteries.
- Observe the polarity of batteries when loading them.
- Do not use one new battery with one old battery.
- Be sure to use batteries of the same brand. Batteries may vary in voltage even though they look alike.
- If the remote control unit will not be used for a long time, remove the batteries.

CAUTION:
Do not heat batteries or attempt to dispose of them by burning.

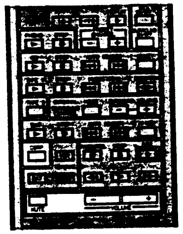
OPERATION WITH THE REMOTE CONTROL UNIT (RM-SR401U/RM-SR501U)

- The RM-SR401U and the RM-SR501U remote control units control the RX-401BK/RX-501BK and JVC's audio visual gear from a remote place via the Compu Link Remote Control System.
- Direct the transmitter window of the remote control unit at target equipment within a distance of 7 meters. Take care to avoid obstacles between the transmitter and the target. Press keys slowly and positively, making sure the desired functions result.
- The key markings on the transitter may not match those on the equipment. Check the markings.
  The remote control units cannot control equipment functions they do not support. Older equipment may not be receptive to their input.
- Check for connection of the COMPU LINK-1/SYNCHRO terminals on the remote equipment by a remote cable.
- The operation of each key on the remote control unit is clearly displayed on the RX-401BK or RX-501BK.
  For specific procedures, refer to the instructions for the particular equipment.
- Switch on the power to all the equipment required before starting operation. The POWER key on the RM-SR501U can switch on the power to the AUDIO (RX-501BK), TV, and VCR.

■Operating the RX-401BK/RX-501BK and other Source Equipment

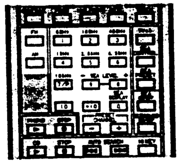
- Aim the signals at the REMOTE SENSOR on the RX-401BK and RX-501BK.

Using the VOLUME, MUTE, CSRP, and SURROUND ON/OFF Keys.



- VOLUME –, +
  Adjust the volume by processing the minus key to lower the sound and the plus key to raise the round.
- MUTE
  Press ON to turn off the sound temporarily. Press again to OFF, or operate the VOLUME key, to turn on the sound again.
- CSRP
  Press to operate CSRP. Press again to turn CSRP off.
- SURROUND ON/OFF
  Press to get surround playback. Press again to turn it off.

Listening to FM/AM Broadcasts

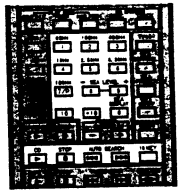


1. Press the FM or AM key to select the source.
2. Use the numeric keys and PRESET CHANNEL keys to select the preset channel mode on the TUNER. The numeric keys are used in the same way as the TUNER numeric keys on the equipment. For reference, see "Listening to AM or FM Broadcasts" under the section OPERATION at the beginning of this instructions.

Listening to Records

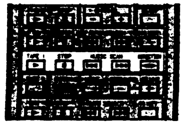
1. Press the PHONO ▶ key to start playing a record.
2. Press the STOP ■ key to stop the record.

Listening to CDs



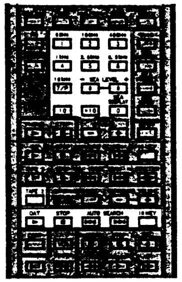
1. Press the CD ▶ key to start playing a CD.
2. Press the STOP ■ key to stop the CD.
   Use the AUTO SEARCH ⏮ and ⏭ keys to go to the beginning of other channels. Press the 10 KEY key to set numeric keys in the CD track number mode. The operation of these keys may vary according to the CD player you use, so be sure to refer to the CD player instructions.

Using a Cassette Deck



1. Press the TAPE1 [▶] key to start the cassette deck.
2. Press the STOP [●] key to stop the cassette deck. Use the MUSIC SCAN [◀◀] and [▶▶] keys to go to the beginning of other channels. Use the DIRECTION [⇆] key to change the direction of the tape.

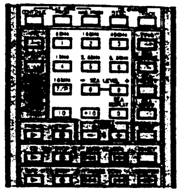
Listening to DAT



1. After pressing the TAPE2 key, press the DAT [▶] key to start the DAT deck. The TAPE2 MONITOR indicator will light up.
2. Press the STOP [●] key to stop the DAT deck. Use the AUTO SEARCH [◀◀] and [▶▶] keys to go to the beginning of other channels. Press the 10 KEY key to set numeric keys in the DAT tune number mode. The operation of these keys may vary according to the DAT deck you use, so be sure to refer to the DAT deck instructions.

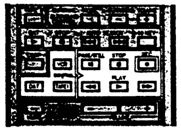
Note:
When the DAT deck is not in use, press the TAPE2 key again to turn it OFF.

Using the CD Autochanger



1. Select a play mode by pressing the PLAY MODE CONTINUE, PRGM, or MAG.PRGM key.
2. Press the DISC key to use numeric keys for entering disc numbers. Select a disc number with the [1] to [7/P] keys.
3. Press the TRACK key to use numeric keys for entering track numbers. Select a track number with the [1] to [10], [+10], and [0] keys. The numeric keys and the play modes vary in function from one type of CD auto-changer to another. Be sure to read the CD auto-changer's instructions.

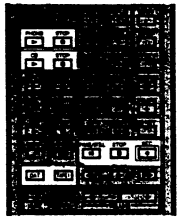
Using the CONTROL keys



Use the following keys to operate a VCR, DAT deck, or cassette deck.

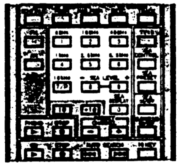
1. Press [VCR], [DAT] or [TAPE1] to select the equipment you wish to operate.
2. Use the VCR, DAT, or TAPE1 control keys to select the operation you wish. Refer to the section "㉔VCR/DAT/TAPE1 Control" for the REMOTE CONTROL UNIT, and to the instructions for each type of equipment before operating these keys.
   Note:
   When operating a VCR be sure to aim the remote control unit at the VCR. When you set a cassette deck or DAT deck to the recording mode, the DAT/TAPE REC indicator will light up for about 3 seconds.

Using Synchronized Recording



1. Press the [DAT] or [TAPE1] key.
2. Press the REC [●] and PAUSE/STILL [❚❚] keys simultaneously to place the tape deck in the REC/PAUSE mode.
3. Press the PHONO [▶] or CD [▶] key to start synchronized recording.
4. Press the STOP [●] key to stop synchronized recording.

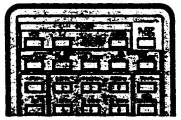
Using the S.E.A. graphic equalizer



1. Press the SEA ON/OFF key.
2. Select a preset pattern with the SEA PRESET key. The pattern will change in the following order each time the SEA PRESET key is pressed:
   [SEA-A] → [SEA-B] → [SEA-C] → [SEA-D] → [HEAVY] → [CLEAR] →
   [SOFT] → [MOVIE] → [VOCAL]
3. To correct a frequency, press the SEA CONTROL key, call the frequency with the 63 Hz [1] to 16 Hz [7/P] keys, and correct the frequency with the SEA LEVEL − [8] and + [9] keys.
4. Press the SEA DISPLAY key and the current S.E.A. pattern will be displayed in ascending frequency order.

Note:
See "Using the S.E.A. graphic equalizer" in the Operation section.

Using the Sleep Timer (RM-SR501U)

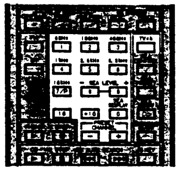


The sleep timer shuts off the RX-501BK (to enter the STANDBY mode) when the preset time intervals have elapsed.
Press the SLEEP TIMER key to set the timer setting mode. Each time the SLEEP TIMER key is pressed shubsequently, the timer can be set up to 80 minutes, in 10-minute multiples. The preset time and the elapsed time are shown on the display.

■Operating other Equipment

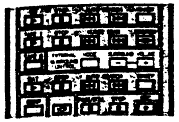
Aim signals at the equipment to be operated.

Selecting a TV Channel



1. Press the TV ch key. The numeric keys and the PRESET CHANNEL keys enter the TV channel mode.
2. Select a TV channel with the numeric keys or the PRESET CHANNEL keys (−, +). The numeric keys vary in operation from one type of TV to another. Read the instructions accompanying the particular TV.

Using the Surround Processor (optional)



1. The SURROUND mode is selected when the MODE key is pressed.
2. Adjust the surround processor volume with the SURROUND VOLUME (−, +) keys.

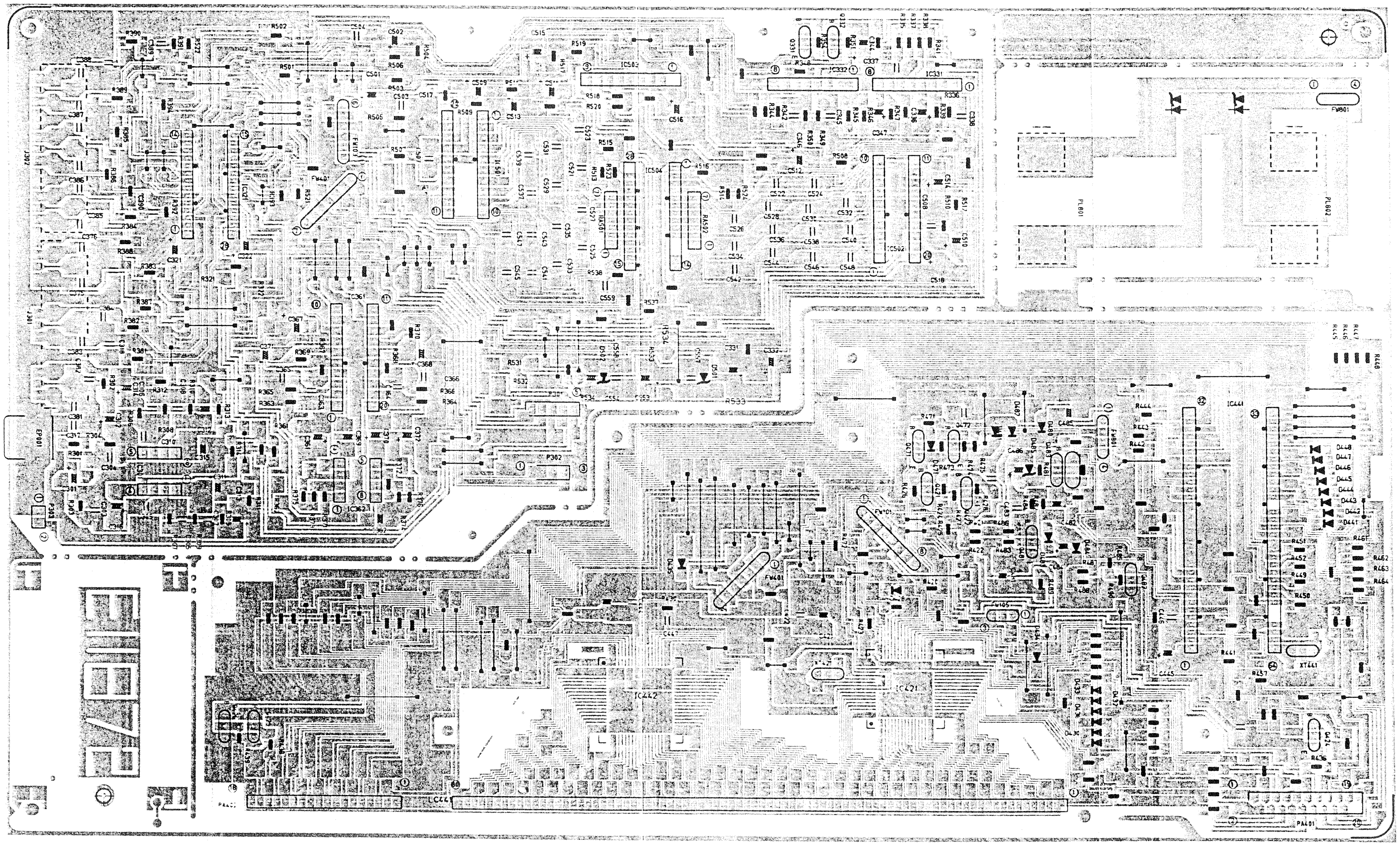
Note:
Connect the surround processor to the TAPE2/VIDEO SOUND terminals. For cabling and operating instructions, refer to the instructions for the surround processor.

TROUBLESHOOTING

**What appears to be a malfunction is not always serious.
First be sure to check basic adjustments.**

No sound and no illumination.
Is the AC plug connected properly?
No sound from the speakers.
Are the speaker cords connected?
Are the SPEAKERS buttons pressed?
Sound from one speaker only.
Are both speaker cords connected?
Is the BALANCE control set to one extreme or the other?
Continuous hiss or buzzing during FM reception.
The incoming signal may be to weak.
Use the correct antenna.
Occasional crackling noise during FM reception.
This may be automobile ignition noise. Move the antenna as far away from the road as possible.
Loud hum during record playing.
Is the turntable grounded?
Try to change the cord path.
Howling during record playing.
Is the turntable too close to a speaker?

(2) Source Select and SEA Control PC Board (ENB-083)


IC502
IC332
IC331
IC501
IC504
IC503
IC361
IC362
IC321
IC442
IC421
IC441
IC444
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PL802
FW801
FW401
FW101
J301
J302
EP001
P302
P303
PA401
PA402
XT441
D441
D442
D443
D444
D445
D446
D447
D448
R533
R502
R501
R506
R505
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R515
R518
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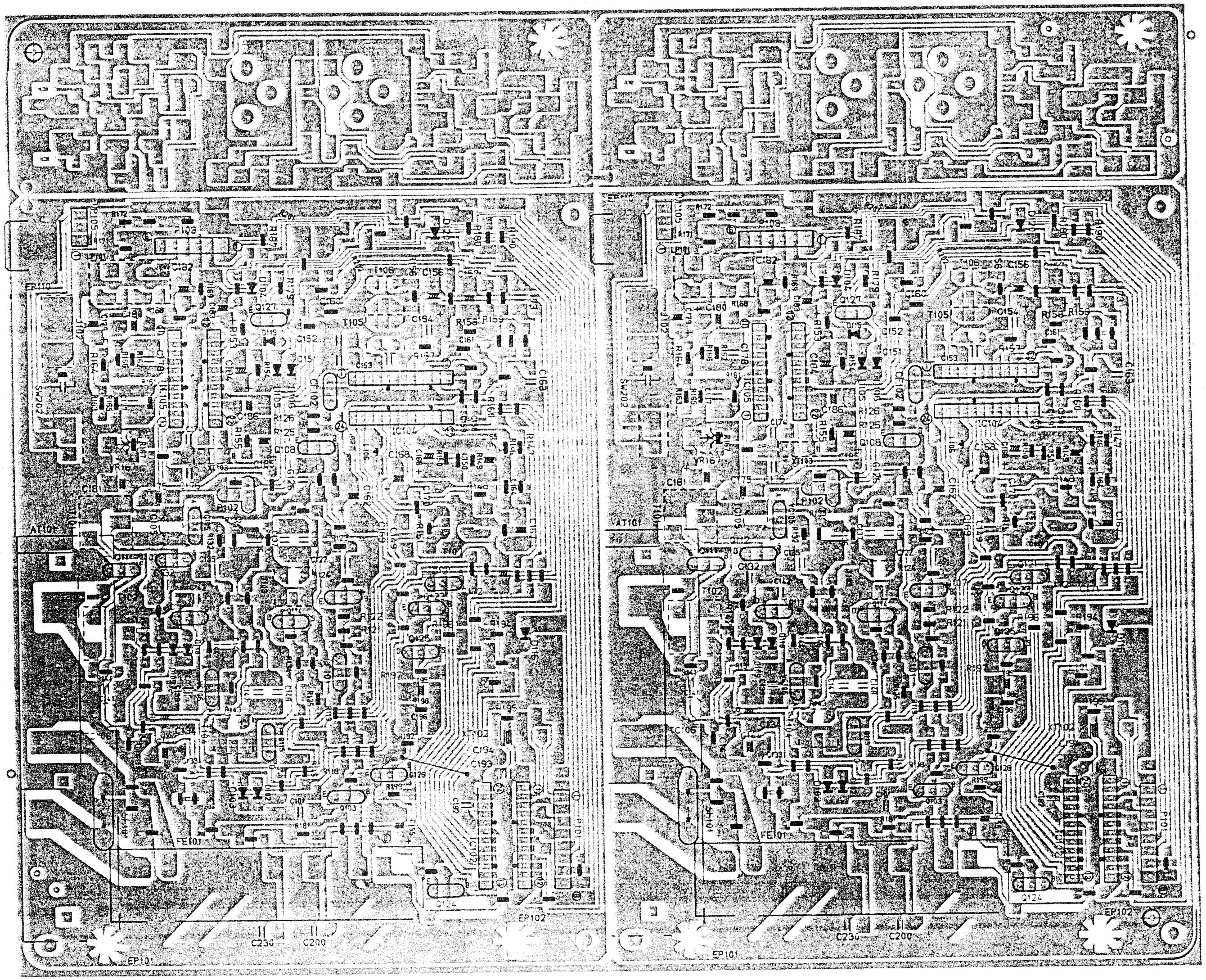
C559
C331
C337
C347
C386
C387
C385
C376
C383
C381
C367
C366
C368
C310
C315
C445
C446
C486

Printed Circuit Boards

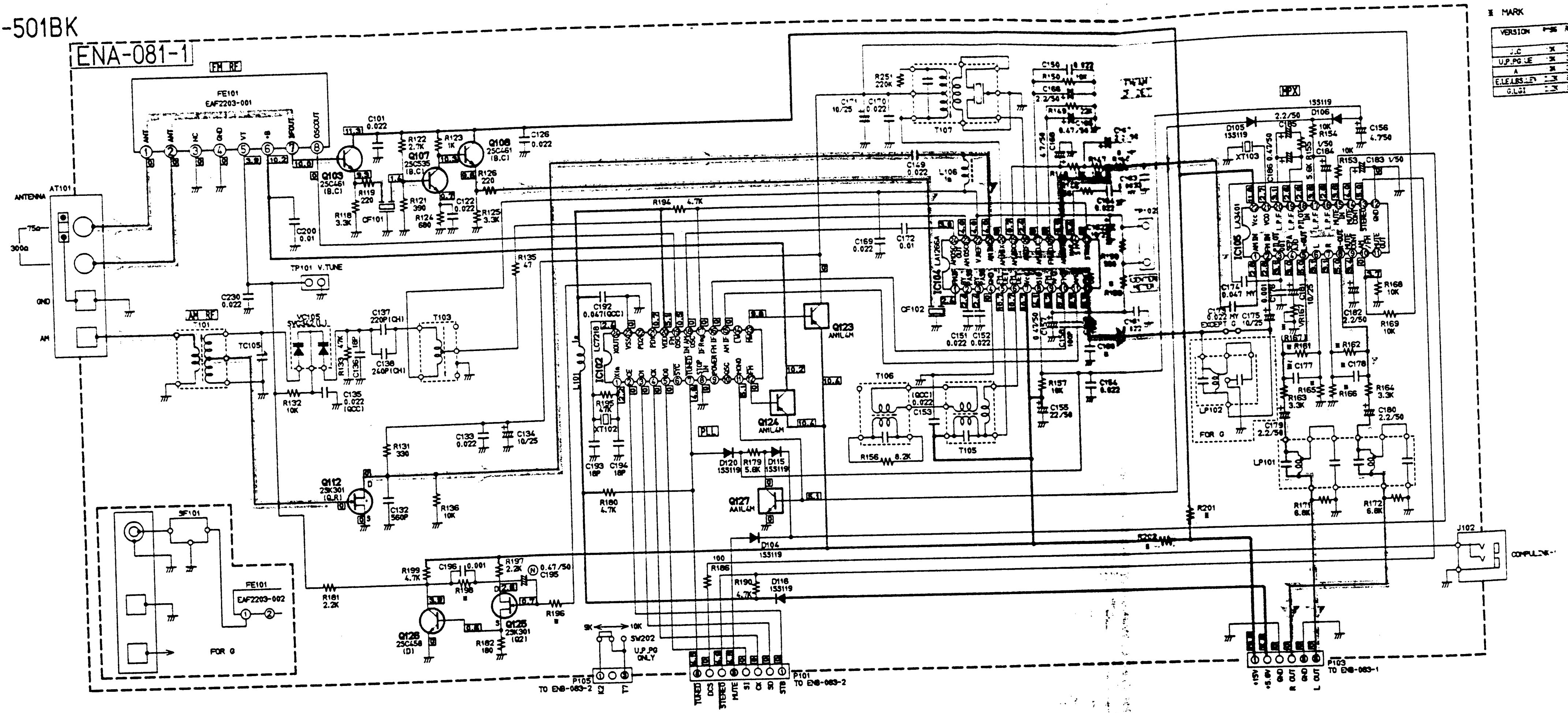
(1) Tuner PC Board (ENA-081)


EP110
AT101
FE101
IC104
IC105
T105
C230
C200
EP101
EP102
P101
Q124

Schematic Diagrams

(1) Tuner Section

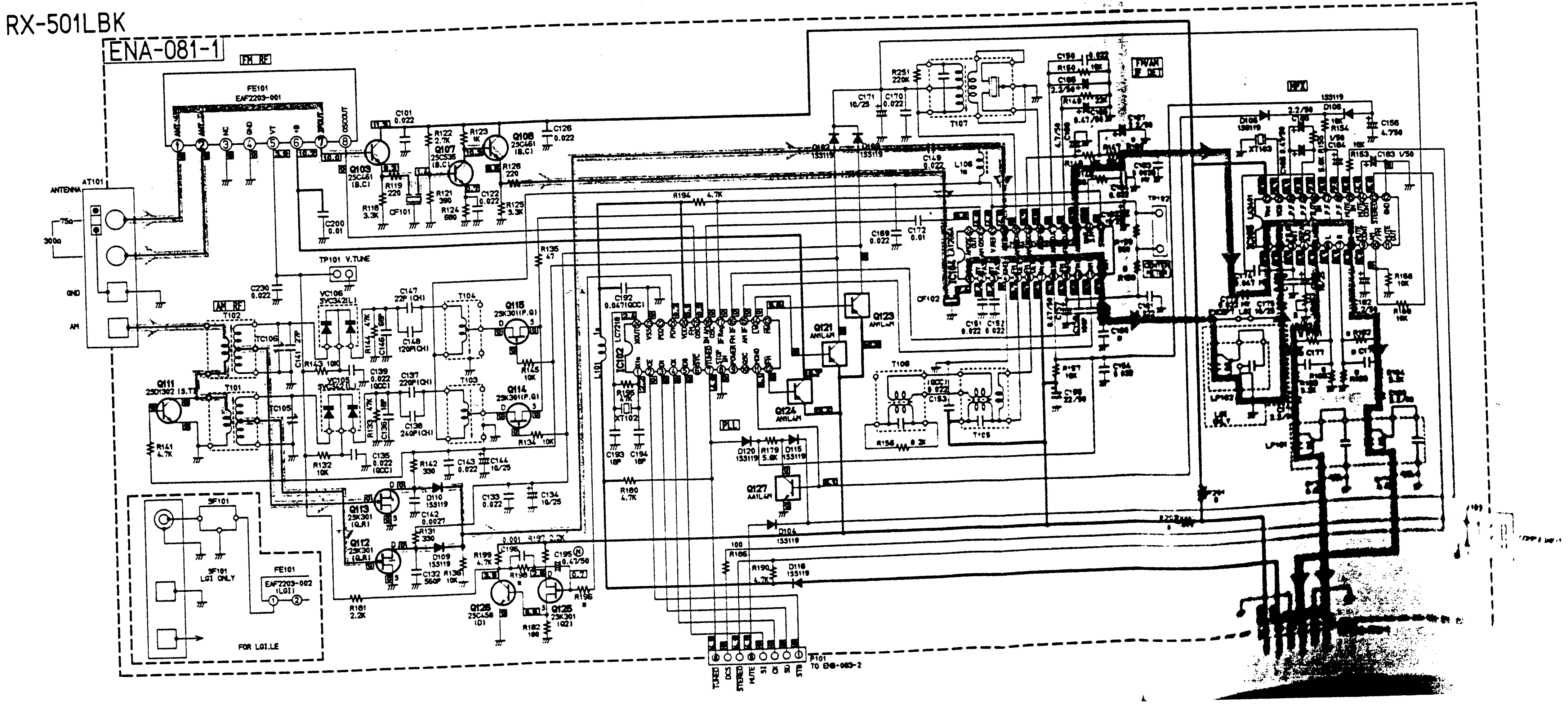
RX-501BK


ENA-081-1
FM RF
FE101
EAF2203-001
ANTENNA
AT101
75Ω
300Ω
GND
AM
AM RF
TP101 V.TUNE
Q103 2SC461 (B.C)
Q107 2SC535 (B.C)
Q108 2SC461 (B.C)
CF101
T103
TC105
VC105
Q112 2SK301 (Q.R)
SF101
FE101 EAF2203-002
FOR G
IC102 LC7218
XT102
Q123 A/A1L4M
Q124 A/A1L4M
Q127 A/A1L4M
PLL
IC104 LA1266A
T106
T107
T105
CF102
MPX
IC105 LA3401
LP101
LP102
FOR G
Q126 2SC458 (D)
Q125 2SK301 (Q.R)
SW202 U,P,PG ONLY
P105 TO ENB-083-2
P101 TO ENB-083-2
TUNED
DCS
STEREO
MUTE
S1
CK
SO
STB
J102
COMPULINK
P103 TO ENB-083-1
+15V
R OUT
GND
L OUT

※ MARK

VERSION	R156	R159	R160	C160	R158	C177 C178	R161 R162	R165 R166	R201	R202	R167 VR167
J.C	3K	3.3K	1.3K	220P	18K	560P	120K	180K	1/6 UNF.C. 68	1/6 UNF.C. 47	39K
U.P.PG.UE	3K	3.3K	1.3K	220P	33K	560P	120K	180K	1/6 UNF.C. 58	1/6 UNF.C. 47	39K
A	3K	3.3K	2.2K	220P	33K	270P	180K	270K	1/6 UNF.F. 68	1/6 UNF.F. 47	100K VR
E.LE.LBS.LE	2.2K	3.3K	2.2K	100P	33K	270P	180K	270K	1/6 UNF.F. 68	1/6 UNF.F. 47	100K VR
G.LGI	2.2K	3.3K	2.2K	220P	33K	270P	180K	270K	1/6 UNF.F. 68	1/6 UNF.F. 27	100K VR

RX-501LBK


ENA-081-1
FM RF
FE101
EAF2203-001
ANTENNA
AT101
75Ω
300Ω
GND
AM
AM RF
TP101 V.TUNE
Q103 2SC461 (B.C)
Q107 2SC535 (B.C)
Q108 2SC461 (B.C)
Q111 2SD1302 (S.T)
T102
T101
T104
T103
VC106
VC105
Q115 2SK301 (P.Q)
Q114 2SK301 (P.Q)
Q113 2SK301 (Q.R)
Q112 2SK301 (Q.R)
SF101
SF101 LGI ONLY
FE101 EAF2203-002 (LGI)
FOR LGI.LE
IC102 LC7218
XT102
Q121 A/A1L4M
Q123 A/A1L4M
Q124 A/A1L4M
Q127 A/A1L4M
PLL
IC104 LA1266A
T106
T107
T105
CF102
FM/AM IF DET
MPX
Q126 2SC458 (D)
Q125 2SK301 (Q.R)
P101 TO ENB-083-2
TUNED
DCS
STEREO
MUTE
S1
CK
SO
STB

Notes:

1 ——— indicates ± B power supply.

2. ▨ indicates signal path.

3. ☐ /[⬭] shows DC voltage to th

no signal input.

☐......FM (⬭) ......A

4. When replacing the parts in the darkened

and those marked with ⚠, be sure to use t

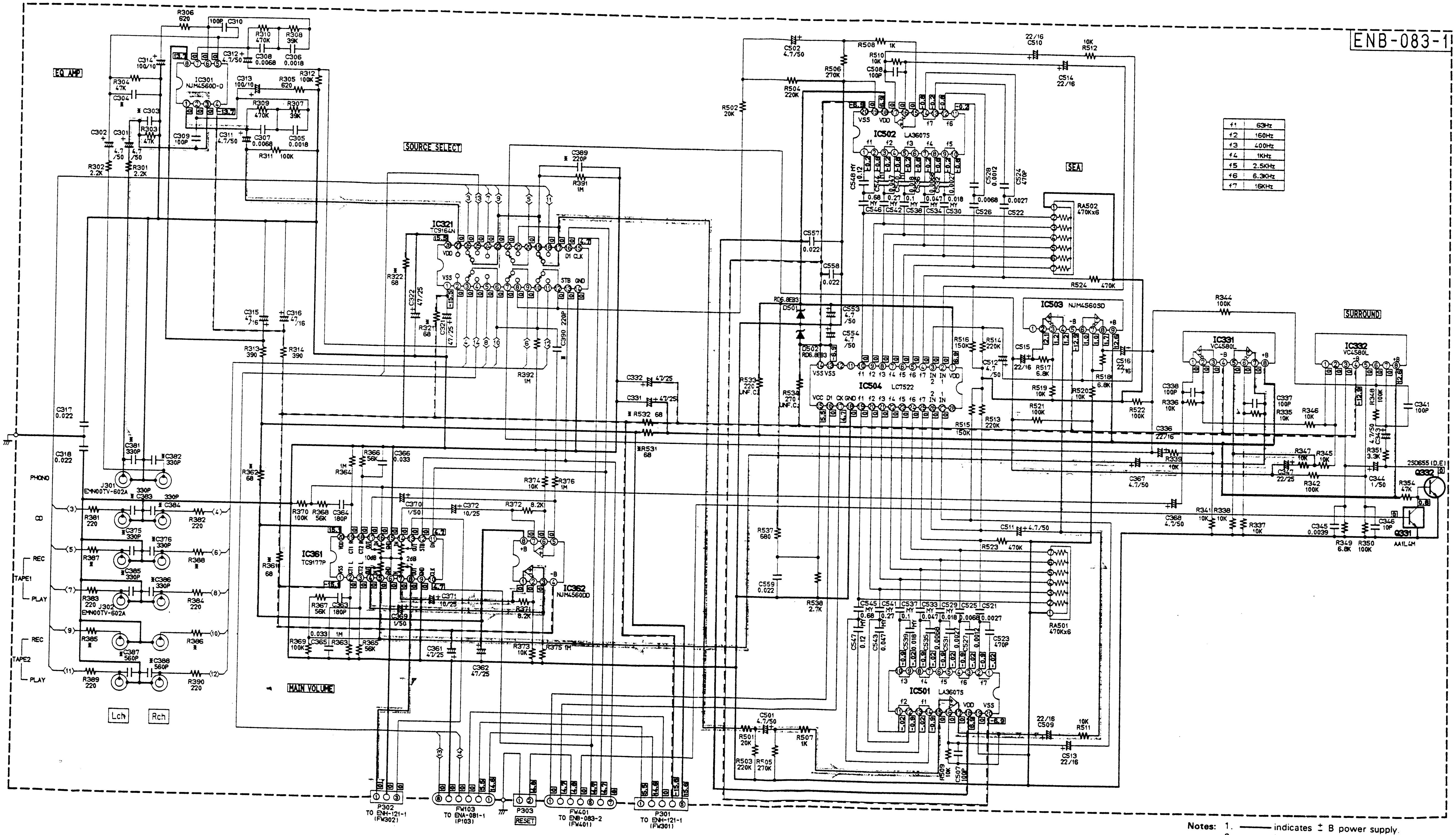
parts to ensure safety.

This is the standerd circuit diagram.

5. The design and contents are subject to

notice.

(2) Source Select & SEA Control Section


ENB-083-1
EQ AMP
IC301 NJM4560D-D
SOURCE SELECT
IC321 TC9164N
SEA
IC502 LA36075
IC504 LC7522
IC503 NJM4560SD
IC501 LA36075
RA502 470Kx6
RA501 470Kx6
SURROUND
IC331 VC4580L
IC332 VC4580L
Q332 2SD655(D,E)
Q331 AA1L4M
MAIN VOLUME
IC361 TC9177P
IC362 NJM4560DD
PHONO
CD
TAPE1 REC
TAPE1 PLAY
TAPE2 REC
TAPE2 PLAY
J301 EHN00TV-602A
J302 EHN00TV-602A
Lch
Rch
f1 63Hz
f2 160Hz
f3 400Hz
f4 1KHz
f5 2.5KHz
f6 6.3KHz
f7 16KHz
P302 TO ENH-121-1 (FW302)
FW103 TO ENA-081-1 (P103)
P303 RESET
FW401 TO ENB-083-2 (P401)
P301 TO ENH-121-1 (FW301)

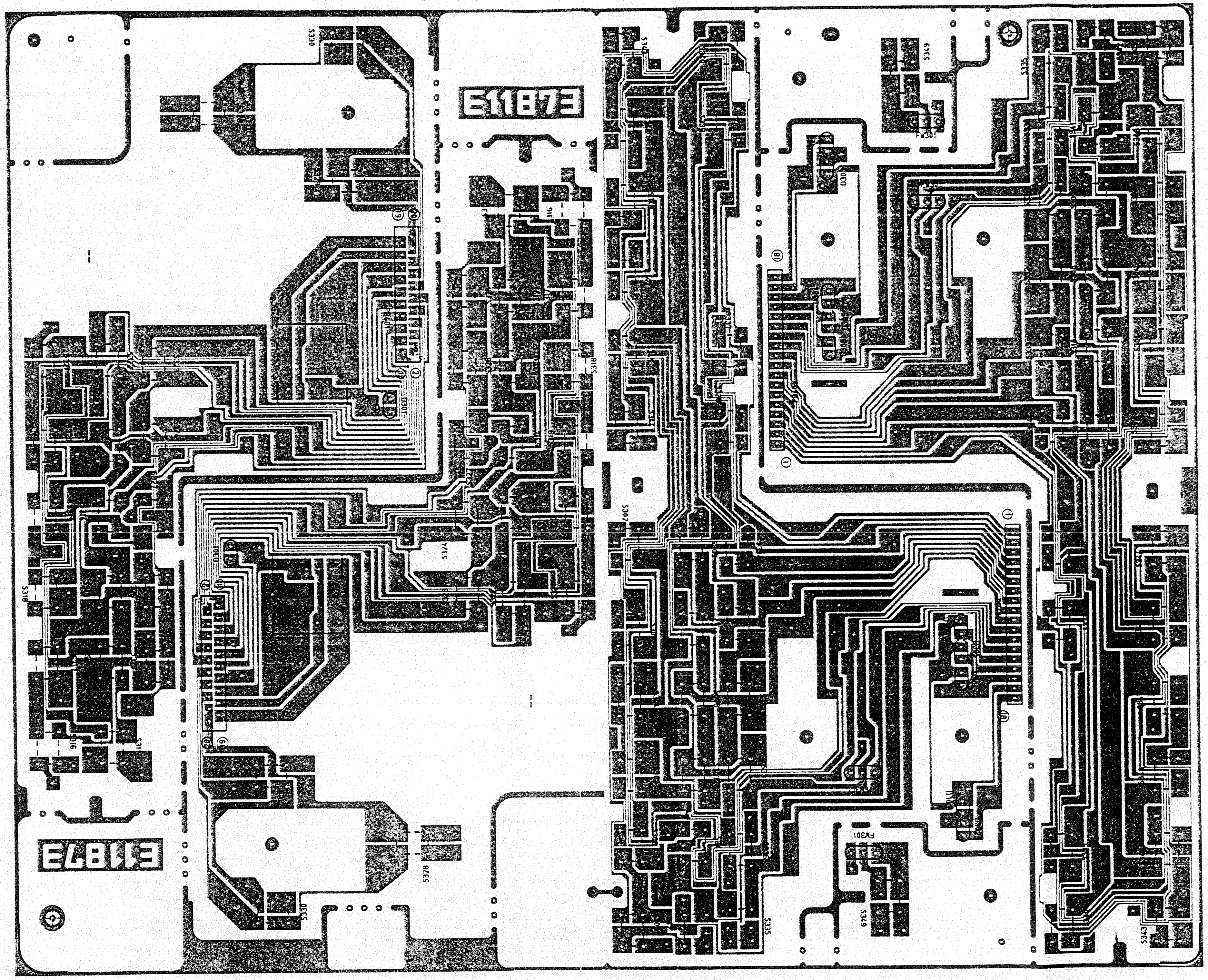
※	J.C	U.P.PG	E.A	LE.LBS	G
C303.304	100P	100P	100P	100P	470P
R385-388	220	220	220	220	2.2K
R321.322	UNF.C.	UNF.C.	UNF.F.	UNF.F.	UNF.F.
R361.362	UNF.C.	UNF.C.	UNF.F.	UNF.F.	UNF.F.
R531.532	UNF.C.	UNF.C.	UNF.F.	UNF.F.	UNF.F
C375.376	NONE	NONE	NONE	NONE	USED
C381-390	NONE	NONE	NONE	NONE	USED

Notes:
1. ——— indicates ± B power supply.
2. ▬ indicates signal path.
3. ▭ shows DC voltage to the chassis with no signal input.
4. When replacing the parts in the darkened area (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
   This is the standerd circuit diagram. standard
5. The design and contents are subject to change without notice.

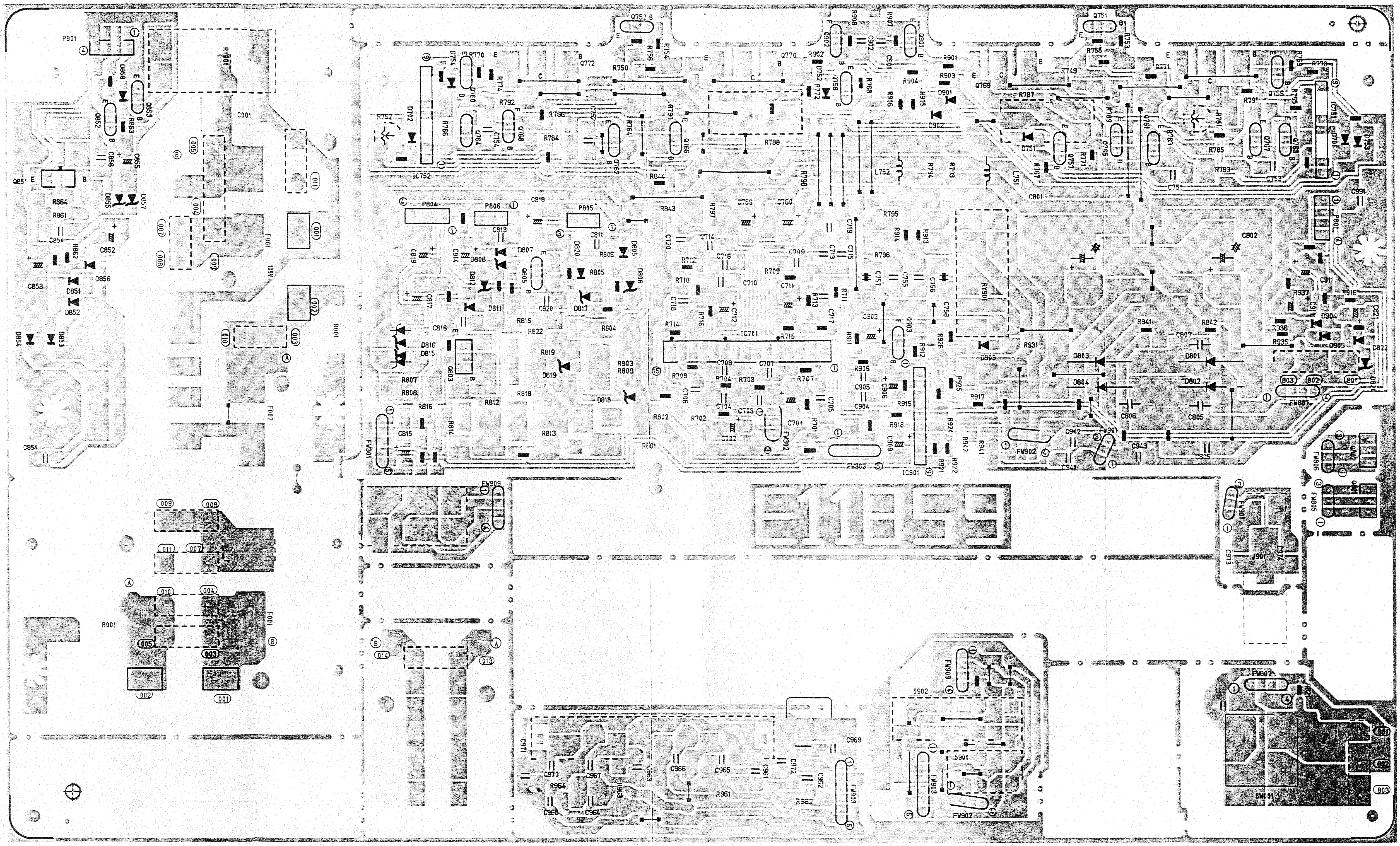
(No.20077)

(No.20077)

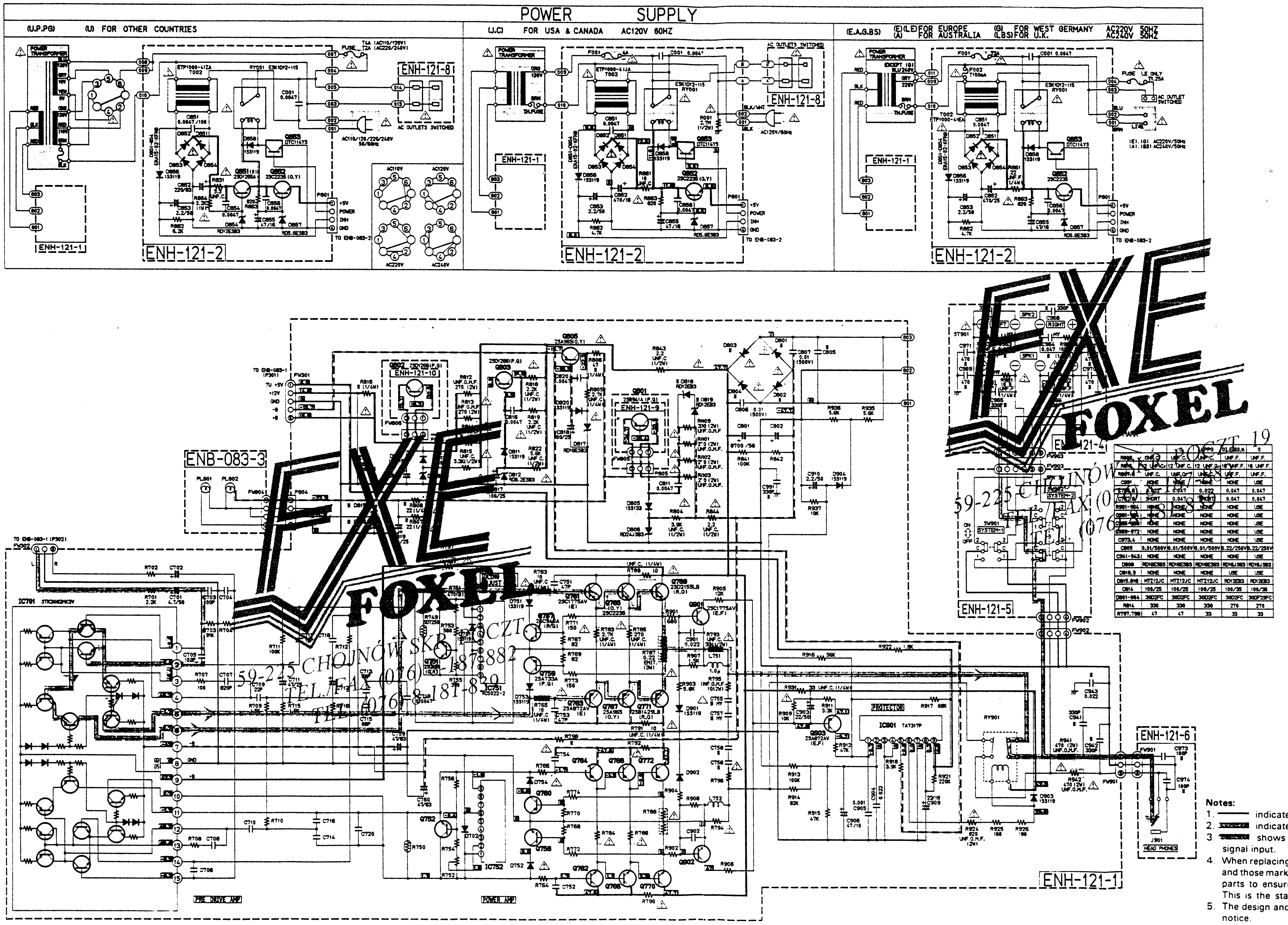
(3) Front Switch PC Board (ENC-061)


E11873
E11873
S330
S349
S335
S318
S302
S328
S343
S374
FW301

(4) Power Amplifier PC Board (ENH-121)


E1859
P801
RY001
C001
F001
F002
R001
Q851
R864
R861
C854
C852
C853
D851
D852
D853
D854
D855
D857
D856
D858
D859
Q852
Q853
R862
R863
C855
C856
C851
IC752
D702
R752
D754
R770
Q760
R774
R792
Q764
Q768
R766
R786
R784
C754
Q772
Q752
R756
R754
R750
R764
Q762
R790
Q766
R788
R844
R843
R797
R798
C759
C760
C720
C714
C716
C718
R712
R710
R716
C712
C710
C711
C709
R709
R711
R713
C713
C715
C717
C719
IC701
R714
R715
C708
C707
R708
R704
R703
R707
C706
C704
C703
C705
C702
C701
R702
R701
R802
R801
FW302
FW303
Q770
R902
D752
R772
Q758
R768
R908
Q902
R907
C902
C901
Q901
R901
R904
R903
D901
R916
R905
D902
Q769
L752
L751
R794
R793
R795
R914
R913
R796
C757
C755
C756
C758
R791
R901
Q903
R911
R912
R926
C903
R909
C905
C906
C904
R915
R918
C999
R925
R924
R942
R917
R941
R931
R922
R921
IC901
D903
FW902
C942
C941
C943
FW901
C802
C801
C751
R841
R842
C807
D801
D802
D803
D804
C806
C805
C803
FW807
Q751
R755
R753
R749
Q771
R787
R789
Q761
R763
Q753
Q757
R771
R757
D751
R751
R785
R783
Q767
Q763
Q759
R791
R773
IC751
D753
C753
C991
P801
R937
R916
C911
C910
D904
D905
R936
R935
C921
D822
D821
801
802
803
P804
P806
P805
C818
C813
C811
C819
C814
C817
C816
C820
D807
D806
D808
D812
D811
D816
D815
D817
D820
D805
D809
R806
R805
R815
R822
R807
R808
R816
R812
R814
R818
R813
R819
R803
R809
R804
D819
D818
Q805
Q803
C815
FW301
FW303
FW909
009
008
011
007
010
004
005
003
002
001
013
014
006
R001
F001
FW806
FW805
FW901
C973
J901
C974
FW909
S902
S901
FW903
FW902
FW807
SW001
C971
C970
R964
C967
R963
C966
C965
C961
C972
C962
C969
C968
C964
R961
R962
FW903

(4) Power Amplifier Section


POWER SUPPLY
(U.P.PG) (U) FOR OTHER COUNTRIES
(J.C) FOR USA & CANADA AC120V 60HZ
(E.A.G.BS) (E)(LE) FOR EUROPE (G) FOR WEST GERMANY AC220V 50HZ
(A) FOR AUSTRALIA (LBS) FOR U.K. AC240V 50HZ
ENH-121-8
ENH-121-1
ENH-121-2
ENH-121-10
ENH-121-9
ENH-121-4
ENH-121-5
ENH-121-6
ENB-083-3
IC701 STK3082MK3V
IC901 TA7317P
PROTECTOR
PRE DRIVE AMP
POWER AMP
HEAD PHONES
TO ENB-083-2

	J	C	U.P.PG	G).EBS.A	G
R806	UNF.C.	UNF.C.	UNF.C.	UNF.F.	UNF.F.
R816	12 UNF.C.	12 UNF.C.	12 UNF.C.	18 UNF.F.	18 UNF.F.
R807.8	UNF.C.	UNF.C.	UNF.C.	UNF.F.	UNF.F.
C991	NONE	NONE	NONE	NONE	USE
C705.6	0.022	0.047	0.022	0.047	0.047
C707.8	SHORT	0.047	SHORT	0.047	0.047
R961-964	NONE	NONE	NONE	NONE	USE
Q961-964	NONE	NONE	NONE	NONE	USE
C965-968	NONE	NONE	NONE	NONE	USE
C969-972	NONE	NONE	NONE	NONE	USE
C973.4	NONE	NONE	NONE	NONE	USE
C805	0.01/500V	0.01/500V	0.01/500V	0.22/250V	0.22/250V
C941-943	NONE	NONE	NONE	NONE	USE
D808	RD16ESB3	RD16ESB3	RD16ESB3	RD16JSB3	RD16JSB3
D818.9	NONE	NONE	NONE	USE	USE
D815.816	MTZ12JC	MTZ12JC	MTZ12JC	RD12EB3	RD12EB3
C816	100/25	100/25	100/25	100/35	100/35
D801-804	30D2FC	30D2FC	30D2FC	30D2FC	30DF2SFC
R814	330	330	330	270	270
R797.798	47	47	33	33	33

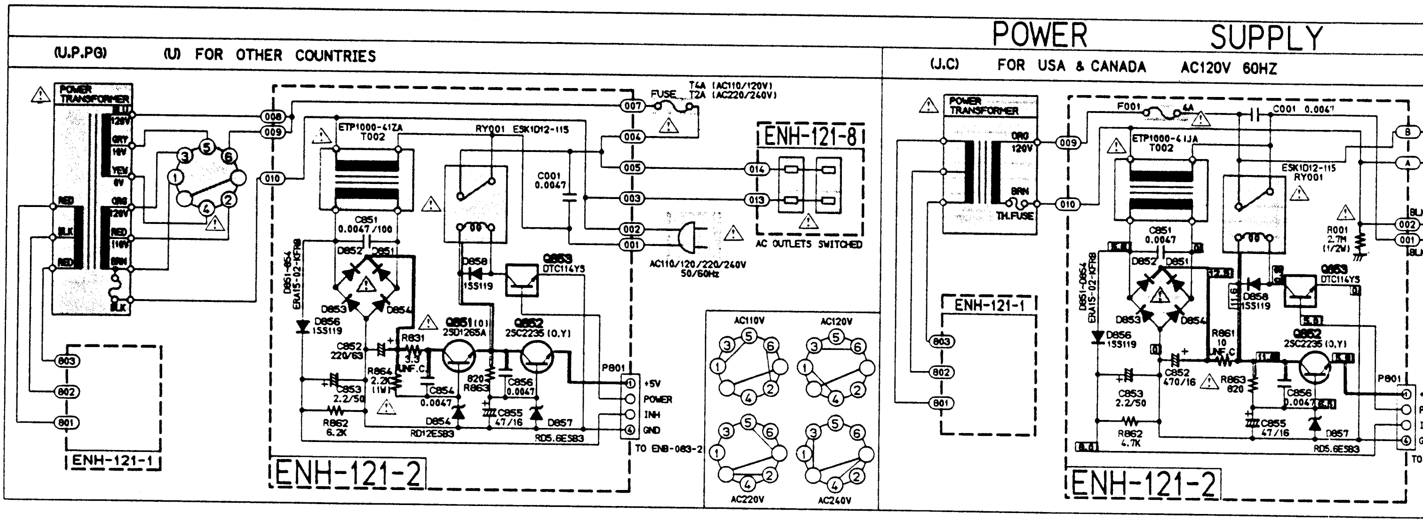
(No.20077) (No.20077)

Notes:

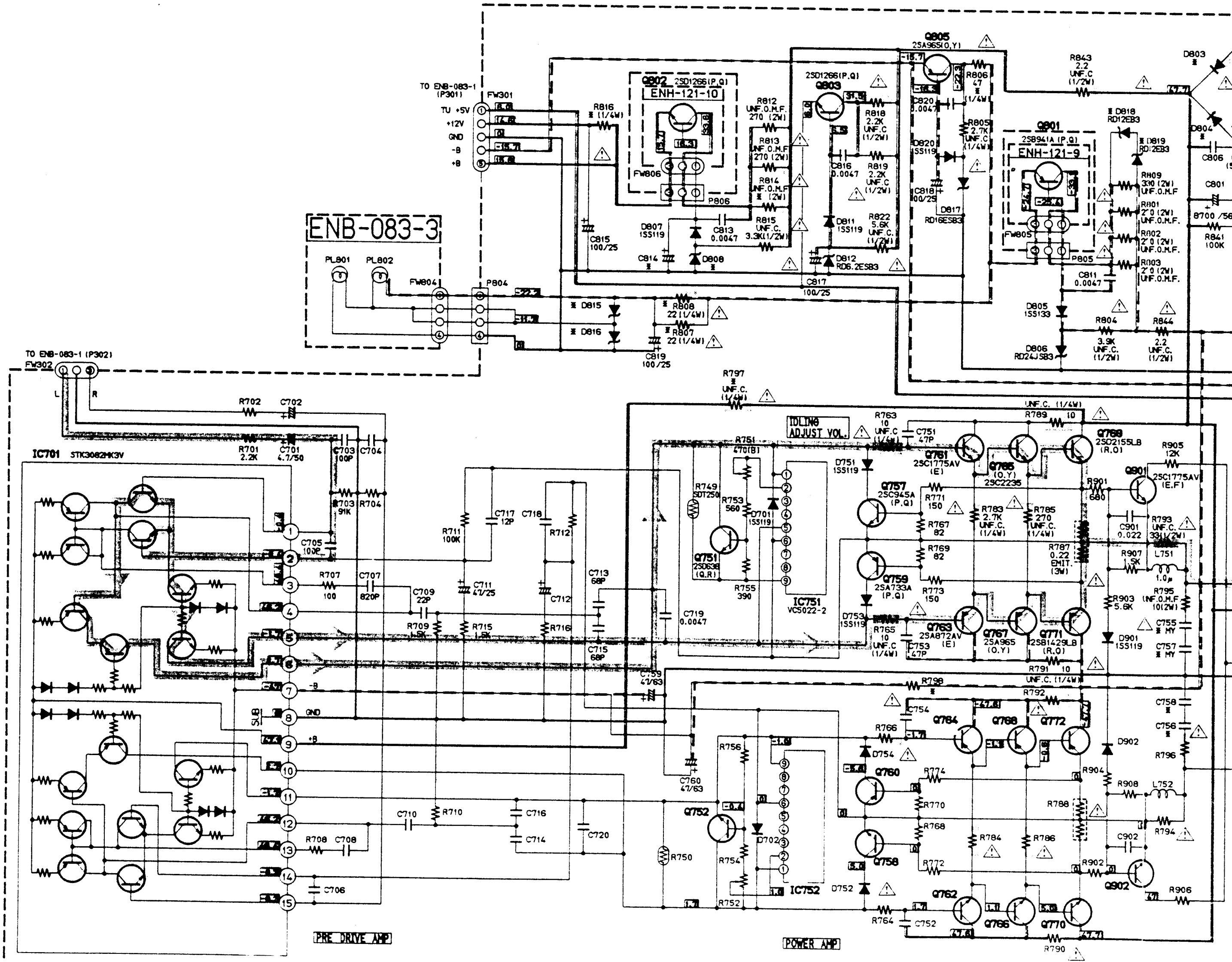
1. ——— indicates ± B power supply.
2. ▬ indicates signal path.
3. ▬ shows DC voltage to the chassis with no signal input.
4. When replacing the parts in the darkened area (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
   This is the standerd circuit diagram. standard
5. The design and contents are subject to change without notice.

EXE FOXEL
59-225 CHOJNÓW SKR. POCZT. 19
TEL./FAX (076) 8 187 882
TEL. (076) 8 181 839

(4) Power Amplifier Section

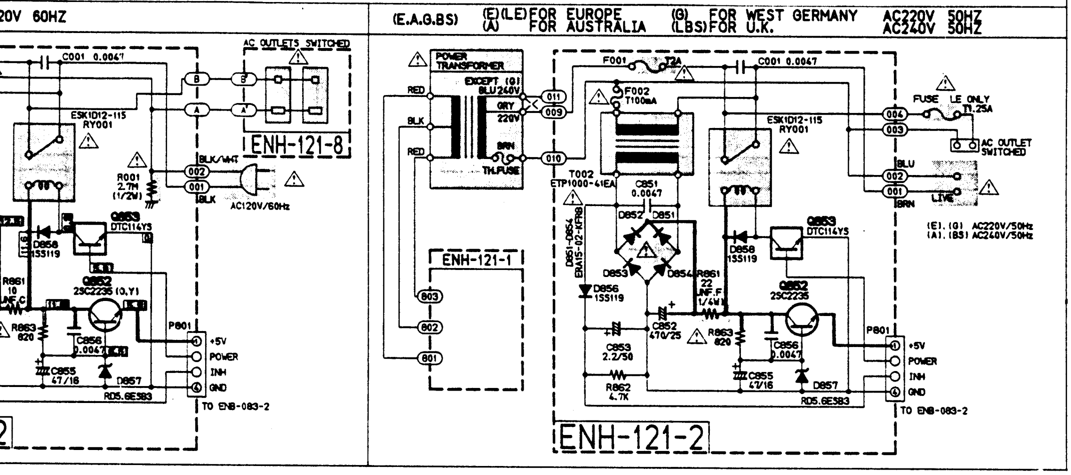


POWER SUPPLY
(U.P.PG)
(U) FOR OTHER COUNTRIES
(J.C)
FOR USA & CANADA
AC120V 60HZ
POWER TRANSFORMER
120V
GRY
16V
YEW
6V
ORG
RED
BRN
BLK
TH.FUSE
FUSE
T4A (AC110/120V)
T2A (AC220/240V)
ETP1000-41ZA
ETP1000-41JA
T002
RY001 ESK1D12-115
C001 0.0047
C851 0.0047/100
D851-854 ERA15-02-KFR8
D852
D851
D853
D854
D856 1SS119
D858 1SS119
Q853 DTC114YS
Q851 2SD1265A
Q852 2SC2235 (O,Y)
R831 3.3 UNF.C
R864 2.2K (1W)
R863 820
C852 220/63
C852 470/16
C853 2.2/50
C854 0.0047
C856 0.0047
C855 47/16
R862 6.2K
R862 4.7K
D854 RD12ESB3
D857 RD5.6ESB3
R861 10 UNF.C
R863 820
R001 2.7M (1/2W)
F001
P801
+5V
POWER
INH
GND
TO ENB-083-2
ENH-121-1
ENH-121-2
ENH-121-8
AC OUTLETS SWITCHED
AC110/120/220/240V 50/60Hz
AC110V
AC120V
AC220V
AC240V

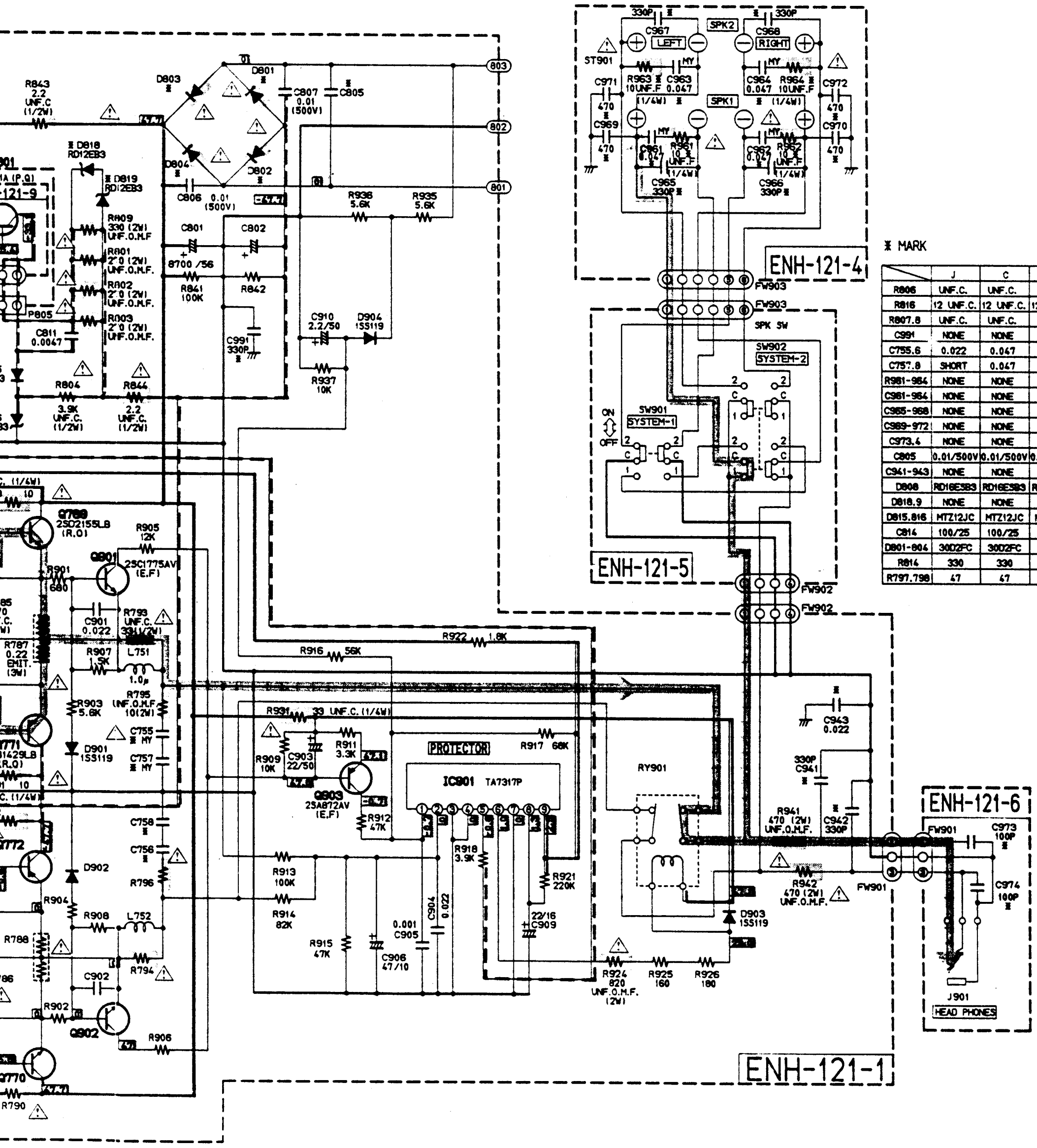


TO ENB-083-1 (P301)
FW301
TU +5V
+12V
GND
-B
+B
Q802 2SD1266 (P,Q)
ENH-121-10
FW806
P806
Q803 2SD1266 (P,Q)
Q805 2SA965 (O,Y)
Q801 2SB941A (P,Q)
ENH-121-9
FW805
P805
R816 (1/4W)
R812 UNF.O.M.F 270 (2W)
R813 UNF.O.M.F 270 (2W)
R814 UNF.O.M.F (2W)
R815 UNF.C. 3.3K (1/2W)
R818 2.2K UNF.C (1/2W)
R819 2.2K UNF.C (1/2W)
R822 5.6K UNF.C (1/2W)
R806 47 (1/4W)
R805 2.7K UNF.C (1/4W)
R843 2.2 UNF.C (1/2W)
R809 330 (2W) UNF.O.M.F
R801 2.0 (2W) UNF.O.M.F.
R802 2.0 (2W) UNF.O.M.F.
R803 2.0 (2W) UNF.O.M.F.
R841 100K
R804 3.9K UNF.C. (1/2W)
R844 2.2 UNF.C. (1/2W)
R808 22 (1/4W)
R807 22 (1/4W)
C815 100/25
C813 0.0047
C814
C816 0.0047
C817 100/25
C818 100/25
C819 100/25
C820 0.0047
C806
C801
C811 0.0047
D807 1SS119
D808
D811 1SS119
D812 RD6.2ESB3
D815
D816
D817 RD16ESB3
D818 RD12EB3
D819 RD12EB3
D820 1SS119
D803
D804
D805 1SS133
D806 RD24JSB3
ENB-083-3
PL801
PL802
FW804
P804
TO ENB-083-1 (P302)
FW302
L
R
IC701 STK3082MK3V
R702
C702
R701 2.2K
C701 4.7/50
C703 100P
C704
R703 91K
R704
C705 100P
R707 100
C707 820P
C709 22P
R709 1.5K
R711 100K
C711 47/25
R715 1.5K
C717 12P
C718
R712
C712
R716
C713 68P
C715 68P
C719 0.0047
C759 47/63
C760 47/63
C710
R710
C716
C714
C720
R708
C708
C706
SUB
GND
-B
+B
PRE DRIVE AMP
R797 UNF.C. (1/4W)
IDLING ADJUST VOL.
R751 470(B)
R749 SDT250
R753 560
D701 1SS119
Q751 2SD636 (Q,R)
R755 390
IC751 VCS022-2
R763 10 UNF.C (1/4W)
C751 47P
D751 1SS119
Q761 2SC1775AV (E)
Q757 2SC945A (P,Q)
R771 150
R767 82
R769 82
Q759 2SA733A (P,Q)
R773 150
D753 1SS119
R765 10 UNF.C (1/4W)
C753 47P
Q763 2SA872AV (E)
Q765 (O,Y) 2SC2235
R783 2.7K UNF.C. (1/4W)
R785 270 UNF.C. (1/4W)
Q767 2SA965 (O,Y)
Q769 2SD2155LB (R,O)
Q771 2SB1429LB (R,O)
R787 0.22 EMIT. (3W)
R789 10 UNF.C. (1/4W)
R791 10 UNF.C. (1/4W)
R905 12K
Q901 2SC1775AV (E,F)
R901 680
C901 0.022
R793 UNF.C. 33 (1/2W)
R907 1.5K
L751 1.0μ
R903 5.6K
R795 UNF.O.M.F 10 (2W)
C755 MY
C757 MY
D901 1SS119
R798
R792
C754
R766
D754
Q764
Q768
Q772
R756
Q760
R774
R770
R768
Q752
R750
R754
D702
IC752
D752
Q758
R772
R784
R786
R788
R904
R908
L752
C902
R794
R902
Q902
R906
D902
R796
C758
C756
R764
C752
R752
Q762
Q766
Q770
R790
POWER AMP

SUPPLY



20V 60HZ
(E.A.G.BS) (E)(LE) FOR EUROPE (A) FOR AUSTRALIA
(G) FOR WEST GERMANY (LBS) FOR U.K.
AC220V 50HZ
AC240V 50HZ
C001 0.0047
AC OUTLETS SWITCHED
ESK1D12-115 RY001
ENH-121-8
R001 2.7M (1/2W)
BLK/WHT
BLK
AC120V/60Hz
Q853 DTC114YS
D858 1SS119
R861 10 UNF.C
Q852 2SC2235 (O,Y)
R863 820
C856 0.0047
C855 47/16
D857 RD5.6ESB3
P801
+5V
POWER
INH
GND
TO ENB-083-2
POWER TRANSFORMER
EXCEPT (G)
BLU 240V
GRY 220V
BRN
TH.FUSE
RED
BLK
F001 T2A
F002 T100mA
T002 ETP1000-41EA
C851 0.0047
D851-D854 ERA15-02-KFR8
D856 1SS119
C853 2.2/50
R862 4.7K
C852 470/25
R861 22 UNF.F (1/4W)
Q852 2SC2235
ENH-121-1
ENH-121-2
FUSE LE ONLY T1.25A
AC OUTLET SWITCHED
BLU
BRN
LIVE
(E), (G) AC220V/50Hz
(A), (BS) AC240V/50Hz



R843 2.2 UNF.C (1/2W)
D803
D801
D804
D802
C807 0.01 (500V)
C805
C806 0.01 (500V)
D818 RD12EB3
D819 RD12EB3
R409 330 (2W) UNF.O.M.F
R801 2.0 (2W) UNF.O.M.F.
R802 2.0 (2W) UNF.O.M.F.
R803 2.0 (2W) UNF.O.M.F.
C801
C802
8700/56
R841 100K
R842
C811 0.0047
P805
R804 3.9K UNF.C (1/2W)
R844 2.2 UNF.C (1/2W)
R936 5.6K
R935 5.6K
C991 330P
C910 2.2/50
D904 1SS119
R937 10K
ST901
C967 330P
C968 330P
LEFT
RIGHT
SPK2
SPK1
R963 10 UNF.F
C963 0.047
C964 0.047
R964 10 UNF.F
C971 470
C969 470
C972 470
C970 470
C961 0.047
R961 10 UNF.F
C962 0.047
R962 10 UNF.F
C965 330P
C966 330P
ENH-121-4
FW903
SPK SW
SW902 SYSTEM-2
SW901 SYSTEM-1
ON
OFF
ENH-121-5
FW902
Q768 2SD2155LB (R,O)
R905 12K
Q901 2SC1775AV (E,F)
R901 680
C901 0.022
R793 UNF.C. 33(1/2W)
R787 0.22 EMIT. (3W)
R907 1.5K
L751 1.0μ
R795 UNF.O.M.F 10(2W)
R903 5.6K
D901 1SS119
C755 MY
C757 MY
Q771 2SA1429LB (R,O)
Q772
C758
C756
R796
D902
R904
R908
L752
R794
C902
R902
Q902
R906
Q770
R788
R790
R922 1.8K
R916 56K
R931 33 UNF.C. (1/4W)
R909 10K
C903 22/50
R911 3.3K
Q903 2SA872AV (E,F)
R912 47K
PROTECTOR
IC901 TA7317P
R917 68K
R918 3.9K
R921 220K
R913 100K
R914 82K
R915 47K
C905 0.001
C904 0.022
C906 47/10
C909 22/16
R924 820 UNF.O.M.F. (2W)
R925 180
R926 180
RY901
C943 0.022
C941 330P
R941 470 (2W) UNF.O.M.F.
C942 330P
R942 470 (2W) UNF.O.M.F.
D903 1SS119
FW901
ENH-121-6
C973 100P
C974 100P
J901 HEAD PHONES
ENH-121-1

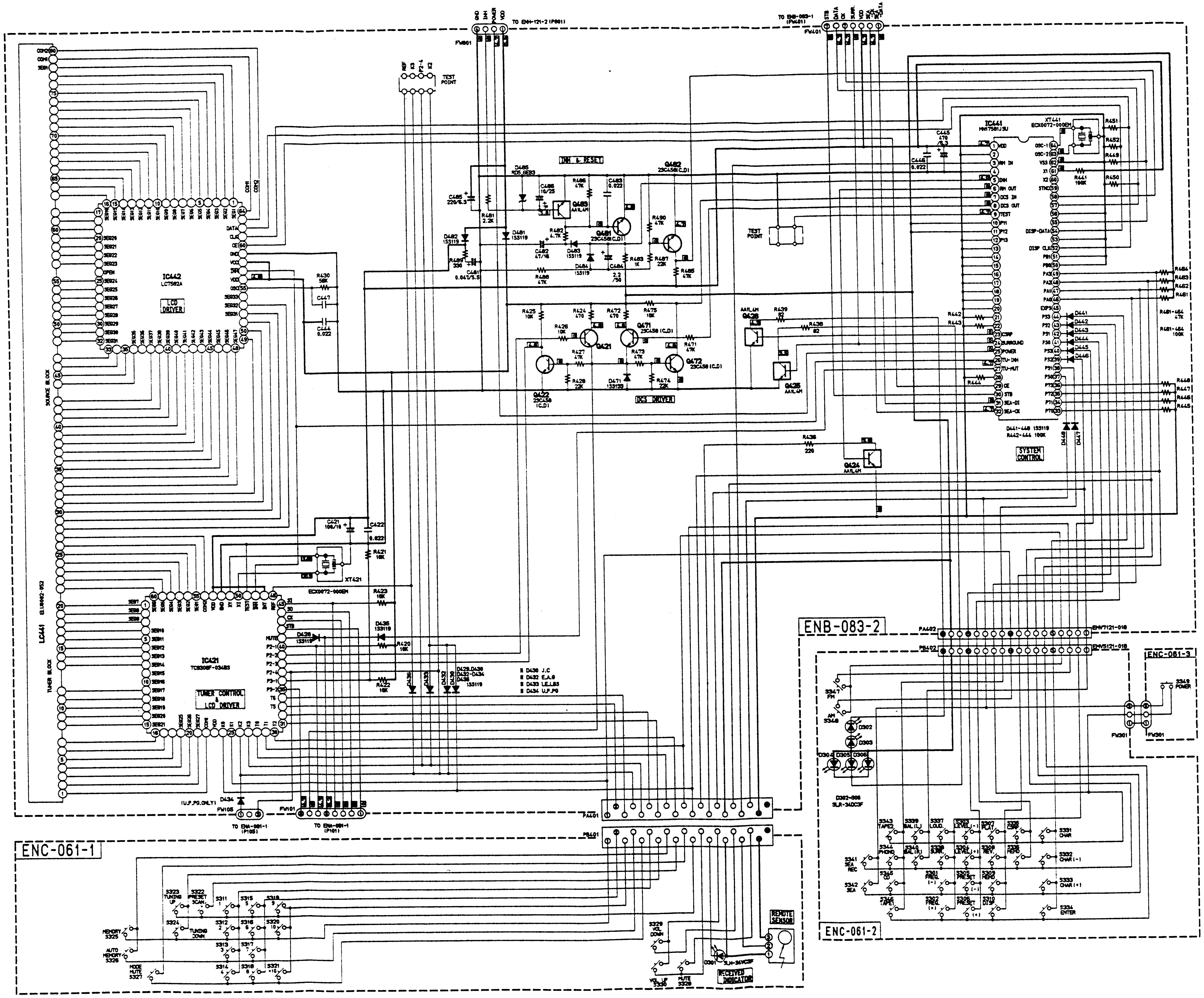
※ MARK

	J	C	U.PPG	GI.E.BS.A	G
R806	UNF.C.	UNF.C.	UNF.C.	UNF.F.	UNF.F.
R816	12 UNF.C.	12 UNF.C.	12 UNF.C.	18 UNF.F.	18 UNF.F.
R807.8	UNF.C.	UNF.C.	UNF.C.	UNF.F.	UNF.F.
C991	NONE	NONE	NONE	NONE	USE
C755.6	0.022	0.047	0.022	0.047	0.047
C757.8	SHORT	0.047	SHORT	0.047	0.047
R961-964	NONE	NONE	NONE	NONE	USE
C961-964	NONE	NONE	NONE	NONE	USE
C965-968	NONE	NONE	NONE	NONE	USE
C969-972	NONE	NONE	NONE	NONE	USE
C973.4	NONE	NONE	NONE	NONE	USE
C805	0.01/500V	0.01/500V	0.01/500V	0.22/250V	0.22/250V
C941-943	NONE	NONE	NONE	NONE	USE
D808	RD16ESB3	RD16ESB3	RD16ESB3	RD16JSB3	RD16JSB3
D818.9	NONE	NONE	NONE	USE	USE
D815.816	MTZ12JC	MTZ12JC	MTZ12JC	RD12EB3	RD12EB3
C814	100/25	100/25	100/25	100/35	100/35
D801-804	30D2FC	30D2FC	30D2FC	30D2FC	30DF2SFC
R814	330	330	330	270	270
R797.798	47	47	33	33	33

Notes:

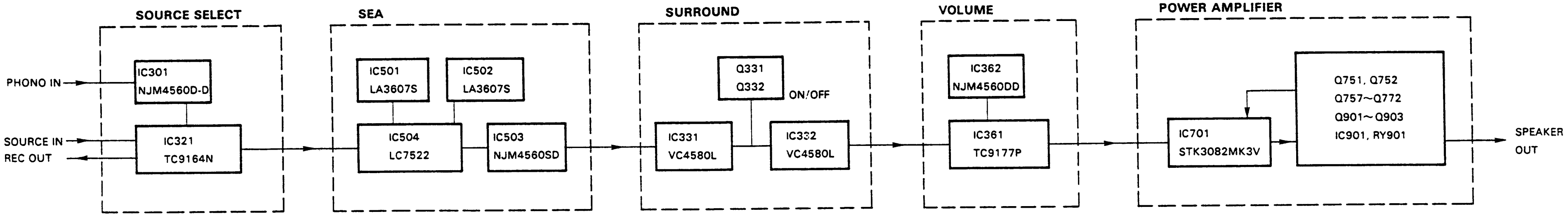
1. ——— indicates ± B power supply.
2. ▬ indicates signal path.
3. ▬ shows DC voltage to the chassis with no signal input.
4. When replacing the parts in the darkened area (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
   This is the standerd circuit diagram. standard
5. The design and contents are subject to change without notice.

(3) LCD Control & Front Switch Section


TO ENH-121-2 (P801)
TO ENB-083-1 (PW401)
TEST POINT
INH & RESET
IC442
LC7582A
LCD DRIVER
IC441
MN17501JSU
SYSTEM CONTROL
DCS DRIVER
IC421
TC9308F-034BS
TUNER CONTROL & LCD DRIVER
LC441
ELU0002-052
SOURCE BLOCK
TUNER BLOCK
XT421
ENB-083-2
ENC-061-1
ENC-061-2
ENC-061-3
REMOTE SENSOR
RECEIVED INDICATOR
TO ENA-081-1 (P105)
TO ENA-081-1 (P101)
FW301
PA402
PB402
PA401
PB401

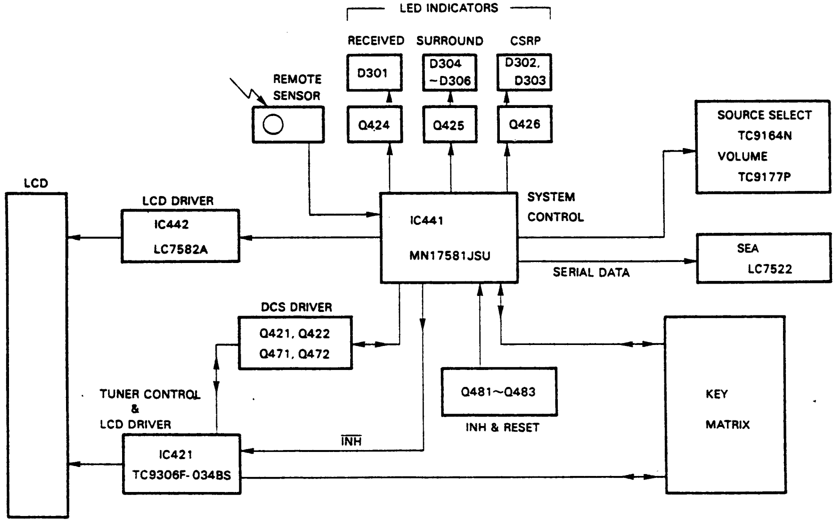
Block Diagrams

■ *Signal Flow*



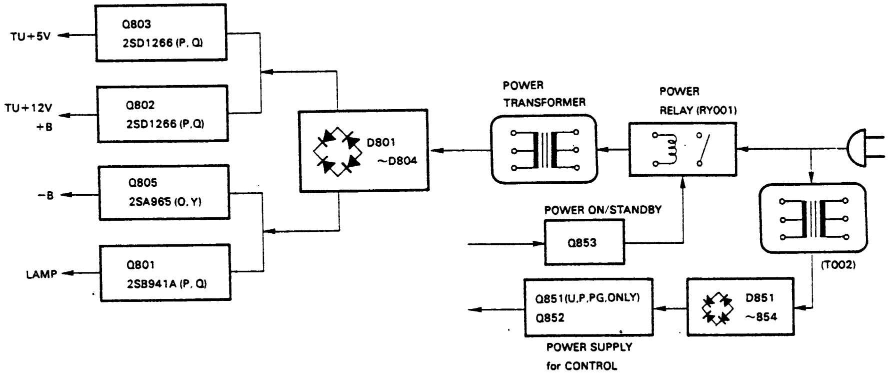
SOURCE SELECT
PHONO IN
IC301
NJM4560D-D
SOURCE IN
REC OUT
IC321
TC9164N
SEA
IC501
LA3607S
IC502
LA3607S
IC504
LC7522
IC503
NJM4560SD
SURROUND
Q331
Q332
ON/OFF
IC331
VC4580L
IC332
VC4580L
VOLUME
IC362
NJM4560DD
IC361
TC9177P
POWER AMPLIFIER
IC701
STK3082MK3V
Q751, Q752
Q757~Q772
Q901~Q903
IC901, RY901
SPEAKER
OUT

■ Control Section



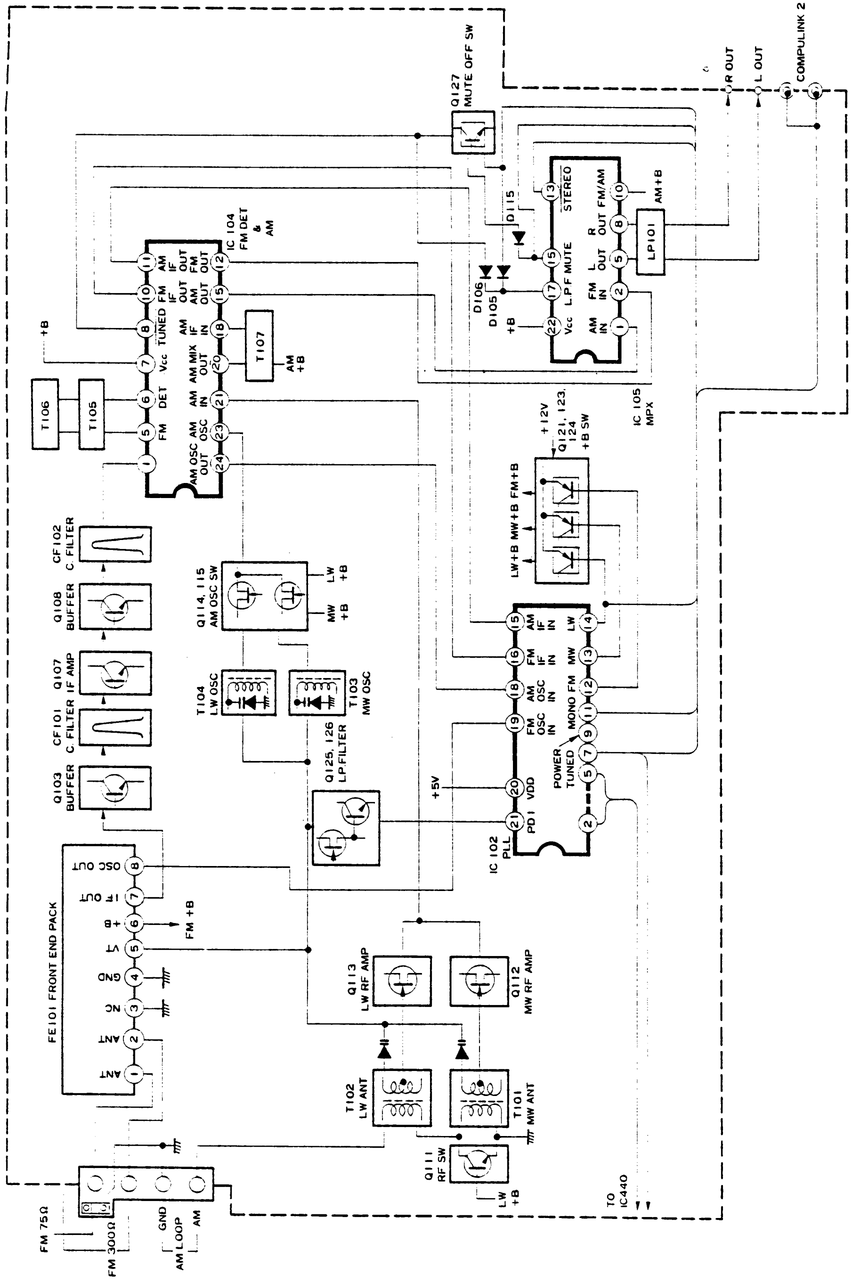
LED INDICATORS
RECEIVED
SURROUND
CSRP
D301
D304
~D306
D302,
D303
REMOTE
SENSOR
Q424
Q425
Q426
SOURCE SELECT
TC9164N
VOLUME
TC9177P
LCD
LCD DRIVER
IC442
LC7582A
IC441
MN17581JSU
SYSTEM
CONTROL
SEA
LC7522
SERIAL DATA
DCS DRIVER
Q421, Q422
Q471, Q472
TUNER CONTROL
&
LCD DRIVER
Q481~Q483
INH & RESET
KEY
MATRIX
IC421
TC9306F-034BS
INH

■ Power Supply Section



TU+5V
Q803
2SD1266 (P, Q)
TU+12V
+B
Q802
2SD1266 (P,Q)
−B
Q805
2SA965 (O, Y)
LAMP
Q801
2SB941A (P, Q)
D801
~D804
POWER
TRANSFORMER
POWER
RELAY (RY001)
POWER ON/STANDBY
Q853
(T002)
Q851(U,P,PG,ONLY)
Q852
POWER SUPPLY
for CONTROL
D851
~854

■ Tuner Section


Q127 MUTE OFF SW
R OUT
L OUT
COMPULINK 2
IC 104 FM DET & AM
IC 105 MPX
STEREO
L.P.F MUTE
LP101
AM+B
D115
D106
D105
T107
T106
T105
CF102 C FILTER
Q108 BUFFER
Q107 IF AMP
CF101 C FILTER
Q103 BUFFER
Q114, 115 AM OSC SW
T104 LW OSC
T103 MW OSC
Q125, 126 LPFILTER
Q121, 123, 124 +B SW
+12V
LW+B MW+B FM+B
IC 102 PLL
+5V
FE101 FRONT END PACK
FM +B
Q113 LW RF AMP
Q112 MW RF AMP
T102 LW ANT
T101 MW ANT
Q111 RF SW
TO IC440
FM 75Ω
FM 300Ω
GND
AM LOOP
AM

Removal Procedures

■ Removing the Top Cover

1. Remove six screws fixing the top cover (four screws on the both sides and two on the rear).

2. Dismount the top cover by slightly opening its sides and lifting the rear.

■ Removing the Front Panel

1. Remove the top cover. (Refer to above item.)

2. Remove three plastic rivets on the upper part of the front panel and three screws from the lower part.

■ Removing the Front Switch PCBs

1. Remove the front panel. (Refer to above item.)

2. Remove four plastic rivets (A)~(C) securing the front switch PCBs. (Fig.1)

3. Lift up the bottom-end of the front switch PCBs and pull it out toward you from the connector. (Fig.2)

■ Removing the LCD PCB

1. Remove the front switch PCB. (Refer to above item.)

2. Remove three plastic rivets' (D) securing the LCD PCB. (Fig.1 and Fig.3)

■ Removing the Tuner PCB

1. Remove the top cover. (Refer to above item.)

2. Remove four screws from the rear panel.

3. Remove three screws (E) securing the tuner PCB. (Fig.3)

■ Removing the Power Transistors

1. Remove the top cover. (Refer to above item.)

2. Demount the bottom cover by removing 13 screws from the bottom.

3. Unsolder the power transistors.

4. Remove the screws holding the power transistors using a wrench having a diagonal length 5.5 mm.

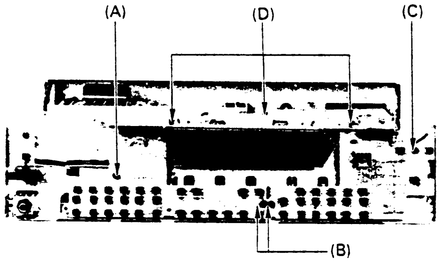


Fig. 1

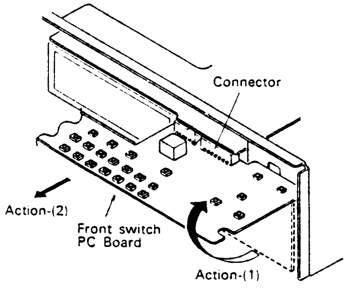

Connector
Action-(2)
Front switch PC Board
Action-(1)

Fig. 2

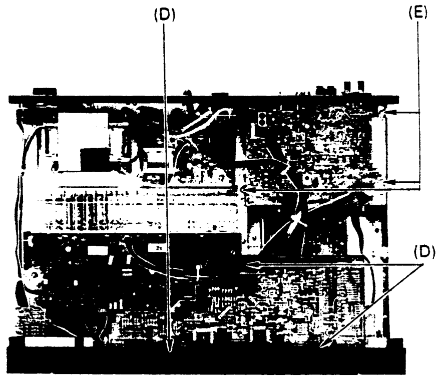
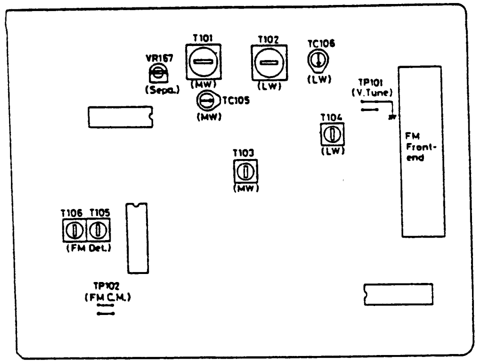


Fig. 3

FM/MW/LW Tuner Alignment Procedures



(1) FM Front-end Section

1. Set the frequency display to "108.0 MHz" and the FM MODE switch to "MONO" position.
2. Confirm that there is noise with no input signal.
3. Confirm that the output of test point "TP101" is 8.0 V.
4. Set the frequency display to "87.5 MHz" and confirm that the output of test point "TP101" is 1.6 V.

(2) Center Meter and Distortion

FM detector coil : T105, T106

1. Connect a center-meter or a digital voltmeter to test point "TP102", and tune to a 100.1 MHz signal(1kHz modulation, 75kHz deviation) with SSG ATT 70dB.
2. Adjust T105 so that the center-meter indicates "0" or the digital voltmeter reads 0 mV.
3. At the same time, adjust T106 so that the distortion of the audio output is minimized.

(3) Stereo Separation (for Europe only)

Adjusting volume : VR167

1. Tune to a 98.1 MHz stereo signal.
2. Adjust VR167 so that the channel separation becomes maximum.

(4) LW Section (for Europe only)

LW oscillator coil : T104

1. Set the frequency display to 144 kHz.
2. Adjust T104 to obtain 0.8 V at test point "TP101".
3. Set the frequency display to 353 kHz and confirm that the output of test point "TP101" is 7,7 V.

LW antenna coil : T102

4. Connect a loop antenna to the "AM LOOP" terminal on the rear panel.
5. Adjust T102 to obtain the best reception sensitivity at 164 kHz.

LW antenna trimmer : TC106

6. Adjust TC106 to obtain the best receiving sensitivity on 353 kHz.

In case of Italy

1. Set the frequency display to 144 kHz.
2. Adjust T104 to obtain 1.0 V at test point "TP101".
3. Set the frequency display to 290 kHz and confirm that the output of test point "TP101" is 5.7 V.

LW antenna coil : T102

4. Connect a loop antenna to the "AM LOOP" terminal on the rear panel.
5. Adjust T102 to obtain the best reception sensitivity at 164 kHz.

LW antenna trimmer : TC106

6. Adjust TC106 to obtain the best receiving sensitivity on 245 kHz.

(5) MW Section

Note : [ ]; the U.S.A. and Canada
( ); Australia, the U.K. and Continental Europe and Other Countries

MW oscillator coil : T103

1. Set the frequency display to [530 kHz] (522 kHz) and confirm that the output of test point "TP101" is [0.9 V] (0.9 V).
2. Set the frequency display to [1710 kHz] (1629 kHz) and confirm that the output of test point "TP101" is [8.0 V] (7.5V).

   Note: If its output is over 9 V at [1710 kHz], adjust T103 to obtain [9.0 V].

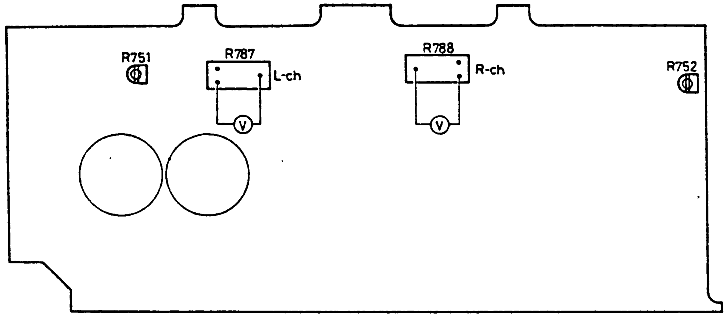
MW antenna coil : T101

3. Connect a loop antenna to the "AM LOOP" terminal on the rear panel.
4. Adjust T101 to obtain the best reception sensitivity at [600 kHz] (603 kHz).

MW antenna trimmer : TC105

5. Adjust TC105 to obtain the best reception sensitivity at [1400 kHz] (1404 kHz).

Power Amplifier Idling Current Adjustment

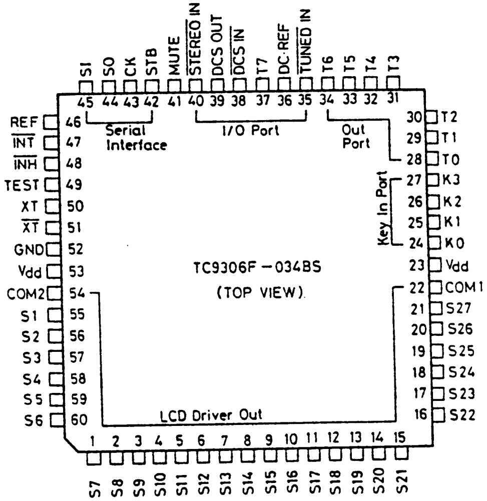

R751
R787
L-ch
R788
R-ch
R752
V
V

1. Turn R751 and R752 fully counterclockwise before the power switch "ON".
2. Allow the set warm up at least 5 minutes before adjustment.
3. Must keep the heat-sink to prevent overheating before adjustment.
4. Set the volume control to minimum during this adjustment.
5. Connect a digital voltmeter to R787 resistor's leads for left channel, or to R788's leads for right channel.
6. Adjust R751 for left channel, or R752 for right channel, so that the digital voltmeter reads 3~5 mV.

Internal Block Diagrams of ICs

■ TC9306F-034BS (IC421): Tuner Controller

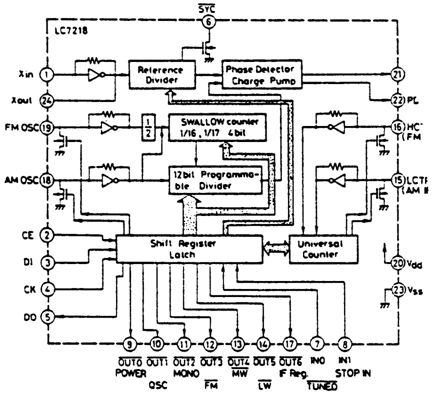
(1) External Diagram


S1 SO CK STB MUTE STEREO IN DCS OUT DCS IN T7 DC REF TUNED IN T6 T5 T4 T3
45 44 43 42 41 40 39 38 37 36 35 34 33 32 31
Serial Interface
I/O Port
Out Port
REF 46
INT 47
INH 48
TEST 49
XT 50
XT 51
GND 52
Vdd 53
COM2 54
S1 55
S2 56
S3 57
S4 58
S5 59
S6 60
30 T2
29 T1
28 T0
27 K3
26 K2
25 K1
24 K0
Key In Port
23 Vdd
22 COM1
21 S27
20 S26
19 S25
18 S24
17 S23
16 S22
TC9306F－034BS
(TOP VIEW)
LCD Driver Out
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 S18 S19 S20 S21

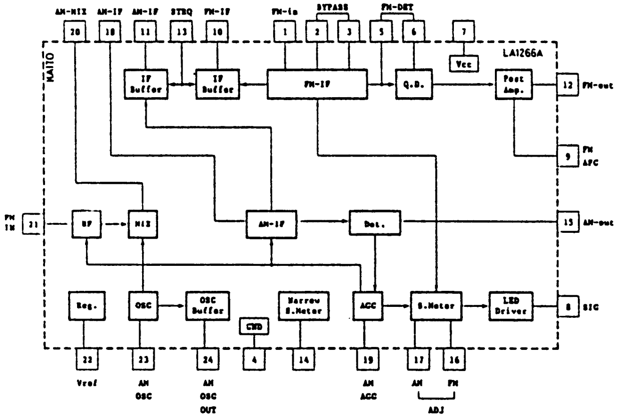
(2) Pin Functions

Pin No.	Name	I/O	Terminal Function
1~21	Seg.7~Seg.27	0	Drive the LCD segment.
22	Common 1	0	Drive the common 1 of the LCD.
23	Vdd	-	Non connection
24~27	Key in 0~3	I	Key input
28~34	Key out 0~6	0	Key output
35	$\overline{\text{TUNED}}$ IN	I	Input for TUNED indicator
36	DC reference	I	Reference voltage for A/D
37	Key out 7	0	Key output
38	$\overline{\text{DCS IN}}$	I	Input for Direct Call System
39	DCS OUT	0	Output for Direct Call System
40	$\overline{\text{STEREO}}$ IN	I	Input for stereo indicator
41	MUTE	0	"H" output when muting is turned ON.
42	STB	0	Serial Data Bus (Connect to LC7218.)
43	CK	0	Serial Data Bus (Connect to LC7218.)
44	SO	0	Serial Data Bus (Connect to LC7218.)
45	SI	I	Serial Data Bus (Connect to LC7218.)
46	REF	0	Output for PLL reference frequency
47	$\overline{\text{INT}}$	I	Initialized at "L" level
48	$\overline{\text{INH}}$	I	State of inhibit at "L" level
49	TEST	---	Connect to GND.
50	XT	---	Terminal of crystal osccilator (7.2 MHz)
51	$\overline{\text{XT}}$	---	Terminal of crystal osccilator (7.2 MHz)
52	GND	---	Ground
53	Vdd	---	+5V
54	Common 2	0	Drive the common 2 of the LCD.
55~60	Seg.1~Seg.6	0	Drive the LCD segment.

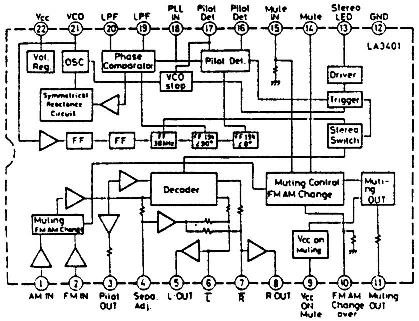
■ LC7218(IC102): PLL Synthesizer


$\overline{\text{SYC}}$
6
LC7218
Xin 1
Xout 24
FM OSC 19
AM OSC 18
CE 2
DI 3
CK 4
DO 5
Reference Divider
Phase Detector Charge Pump
SWALLOW counter 1/16, 1/17 4bit
1/2
12bit Programmable Divider
Shift Register Latch
Universal Counter
21
22 PL
16 HC (FM
15 LCT (AM
20 Vdd
23 Vss
9 10 11 12 13 14 17 7 8
$\overline{\text{OUT0}}$ POWER
$\overline{\text{OUT1}}$ OSC
$\overline{\text{OUT2}}$ MONO
$\overline{\text{OUT3}}$ $\overline{\text{FM}}$
$\overline{\text{OUT4}}$ $\overline{\text{MW}}$
$\overline{\text{OUT5}}$ $\overline{\text{LW}}$
$\overline{\text{OUT6}}$ IF Reg.
IN0 $\overline{\text{TUNED}}$
IN1 STOP IN

■ LA1266A(IC104): FM/AM IF & DET.


AM-MIX 20
AM-IF 18
AM-IF 11
STRQ 13
FM-IF 10
FM-in 1
BYPASS 2 3
FM-DET 5 6
7 Vcc
LA1266A
KAITO
IF Buffer
IF Buffer
FM-IF
Q.D.
Post Amp.
12 FM-out
9 FM AFC
FM IN 21
RF
MIX
AM-IF
Det.
15 AM-out
Reg.
OSC
OSC Buffer
GND
Narrow S.Meter
ACC
S.Meter
LED Driver
8 SIG
22 Vref
23 AM OSC
24 AM OSC OUT
4
14
19 AM ACC
17 AM
16 FM
ADJ

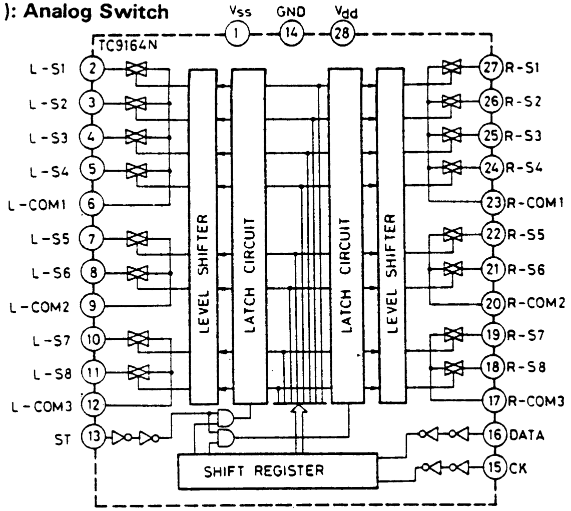
■ LA3401(IC105): FM M.P.X.


Vcc 22
VCO 21
LPF 20
LPF 19
PLL IN 18
Pilot Det 17
Pilot Det 16
Mute IN 15
Mute 14
Stereo LED 13
GND 12
LA3401
Vol. Reg.
OSC
Phase Comparator
VCO stop
Pilot Det.
Driver
Symmetrical Reactance Circuit
Trigger
FF
FF
FF 38kHz
FF 19k ∠90°
FF 19k ∠0°
Stereo Switch
Decoder
Muting Control FM AM Change
Muting OUT
Muting FM AM Change
Vcc on Muting
1 AM IN
2 FM IN
3 Pilot OUT
4 Sepa. Adj.
5 L·OUT
6 $\overline{\text{L}}$
7 $\overline{\text{R}}$
8 R OUT
9 Vcc ON Mute
10 FM AM Change over
11 Muting OUT

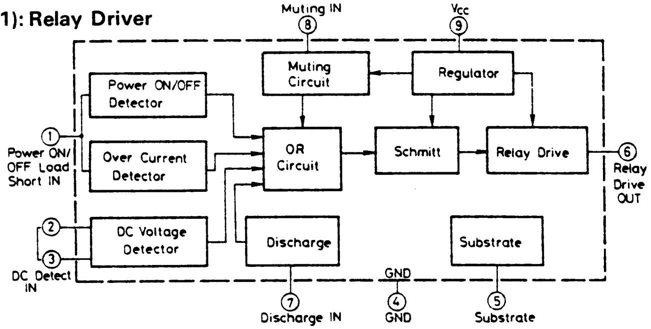
■ LC7218(IC102): PLL Synthesizer

Symbol	Pin No.	Details	Function	I/O
Xin Xout	1 24	X'tal OSC	·Crystal oscillator (7.2 MHz)	I
FM OSC	19	Local oscillator signal input	·FM OSC is selected for serial data input: DV=1 is assigned. ·Input frequency is 10 ~ 130 MHz (125 mVrms min.).	I
AM OSC	18	Local oscillator signal input	·AM OSC is selected for serial data input: DV=0 is assigned. ·When serial data is input: SP=1 is assigned: ·Input frequency is 2 ~ 40 MHz (125 mVrms min.). ·When serial data is input: SP=0 is assigned: ·Input frequency is 0.5 ~ 10 MHz (125 mVrms min.).	I
PD1 PD2	21 22	Charge pump output	·PLL charge pump output. When the local oscillator signal frequency divided by N results in a frequency higher than the reference frequency, high level signals are output from PD1 and PD2.	0
$\overline{\text{SYC}}$	6	Controller clock	·This is the controller clock output pin and a 400 kHz signal (duty 66 %) is output after the power is turned ON.	0
V dd	20	Power supply	·Power supply pin for LC7218. It supplies 4.5 ~ 6.5 V when the PLL circuit is activated.	-
V ss	23	Ground	·GND pin of LC7218.	-
CE	2	Chip enable	·This pin goes high when serial data is input (DI) to LC7218 or output from it.	I
CK	4	Clock	·This clock is used to synchronize data when serial data is input (DI) to or output (DO) from LC7218.	I
DI	3	Input data	·Input pin for serial data which is transmitted from the controller to LC7218. ·A total of 36 bits of data should be input for initialization.	I
DO	5	Output data	·Output pin for serial data transmitted from LC7218 to the controller. ·A total of 24 bits can be output from the internal shift register in synchronized with CK.	0
$\overline{\text{OUT 0}}$ $\overline{\text{OUT 1}}$ $\overline{\text{OUT 2}}$ $\overline{\text{OUT 3}}$ $\overline{\text{OUT 4}}$ $\overline{\text{OUT 5}}$ $\overline{\text{OUT 6}}$	9 10 11 12 13 14 17	POWER QSC MONO FM MW LW IF Reg.	·Latches $\overline{\text{OUT 0}}$ ~ $\overline{\text{OUT 6}}$ of the serial data transmitted from the controller, and inverts the data to output it in parallel. ·$\overline{\text{OUT 0}}$ can outputs the time base for clock (8 Hz). (When TB = 1.) ·$\overline{\text{OUT 1}}$ and $\overline{\text{OUT 2}}$ are complementary outputs. ·$\overline{\text{OUT 0}}$, $\overline{\text{OUT 3}}$, $\overline{\text{OUT 4}}$, $\overline{\text{OUT 5}}$ and $\overline{\text{OUT 6}}$ are N-ch open drain outputs (up to 13 V).	0
IN 0 IN 1	7 8	TUNED STOP IN	·The data at input ports IN 0, IN 1 is converted from parallel to serial, and can be output from output pin DO.	I
HCTR (FM IF)	16	General purpose measurement signal input pin	·With serial data input: SC = 1, HCTR is selected. ·The signal is transmitted to the general-purpose counter (20-bit binary counter) via a 1/8 divider internally.	I
LCTR (AM IF)	15	General purpose counter frequency input pin	·With serial data input: SC = 0, LCTR is selected. ·At this time, if serial data is input: SF = 1 ; ·The signal is transmitted directly to the general-purpose counter without passing through the internal 1/8 divider. ·If serial data is input SF = 0 ; ·Input frequency is 1 Hz ~ 20kHz (V IH = 0.7 V DD min., V IL = 0.3 V DD max.)	I

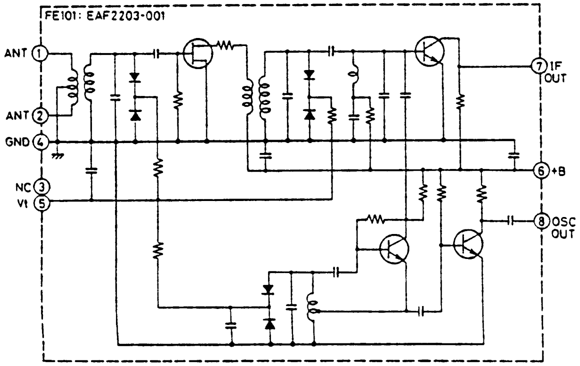
■ TC9164N(IC321): Analog Switch


Vss
GND
Vdd
TC9164N
L-S1
L-S2
L-S3
L-S4
L-COM1
L-S5
L-S6
L-COM2
L-S7
L-S8
L-COM3
ST
R-S1
R-S2
R-S3
R-S4
R-COM1
R-S5
R-S6
R-COM2
R-S7
R-S8
R-COM3
DATA
CK
LEVEL SHIFTER
LATCH CIRCUIT
LATCH CIRCUIT
LEVEL SHIFTER
SHIFT REGISTER

■ TA7317P(IC901): Relay Driver

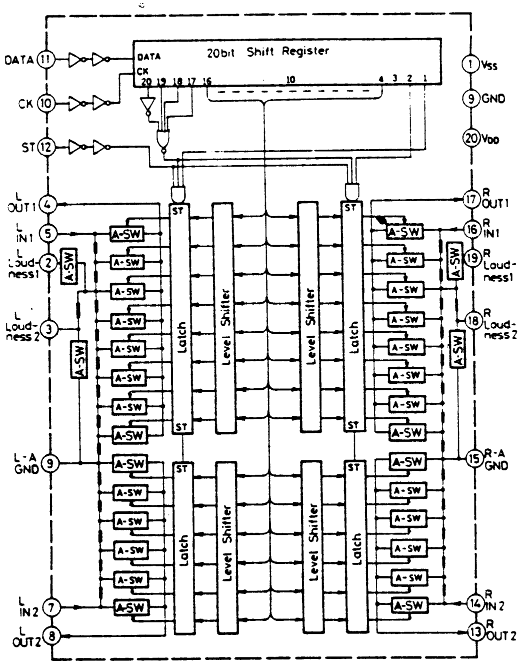

Muting IN
Vcc
Power ON/OFF Detector
Muting Circuit
Regulator
Power ON/ OFF Load Short IN
Over Current Detector
OR Circuit
Schmitt
Relay Drive
Relay Drive OUT
DC Voltage Detector
Discharge
Substrate
DC Detect IN
GND
Discharge IN
GND
Substrate

■ EAF2203-001(FE101): FM Front-end Pack


FE101: EAF2203-001
ANT
ANT
GND
NC
Vt
IF OUT
+B
OSC OUT

■ TC9177P(IC361): Analog Switch

(1) Block Diagram

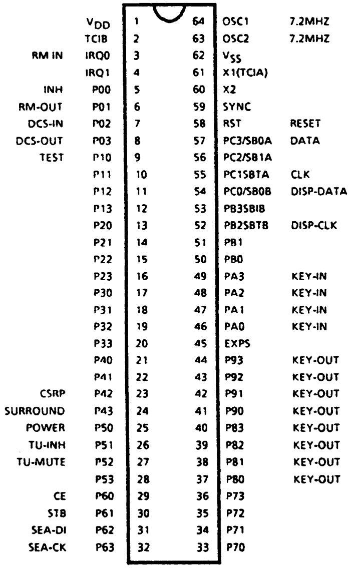

DATA
CK
ST
20bit Shift Register
L OUT1
L IN1
L Loud-ness1
L Loud-ness2
L-A GND
L IN2
L OUT2
Vss
GND
Vdd
R OUT1
R IN1
R Loud-ness1
R Loud-ness2
R-A GND
R IN2
R OUT2
A-SW
Latch
Level Shifter
Level Shifter
Latch
ST

(2) Pin Functions

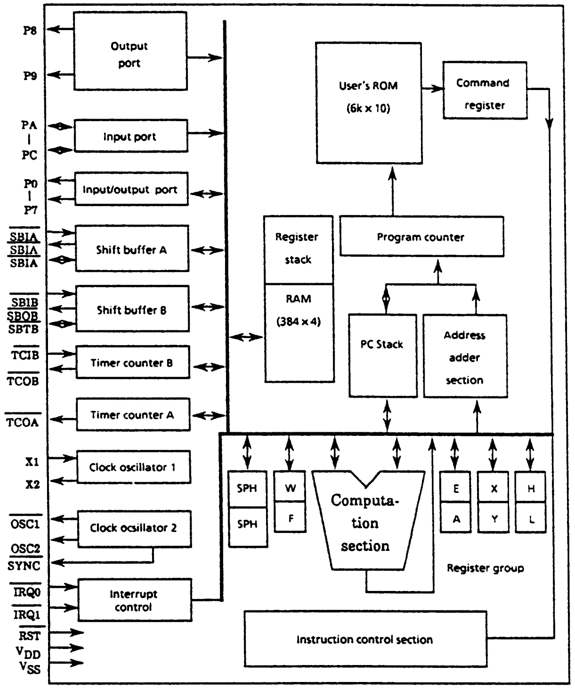
Pin No.	Symbol	Function
1	V ss	(-)Power Supply
2	L Loudness1	Terminal for Loudness (L-ch)
3	L Loudness2	Terminal for Loudness (L-ch)
4	L-OUT1	10dB Step Attenuator Output
5	L-IN 1	10dB Attenuator Input
6	A GND	Ground (Power Supply)
7	L-IN 2	2dB Attenuator Input
8	L OUT2	2dB Step Attenuator Output
9	GND	Ground (Signal)
10	CK	Clock Input
11	DATA	Data Input
12	ST	Strobe Input
13	R-OUT2	2dB Step Attenuator Output
14	R-IN 2	2dB Attenuator Input
15	A-GND	Ground (Power Supply)
16	R IN 1	10dB Attenuator Input
17	R-OUT1	10dB Step Attenuator Output
18	R-Loudness2	Terminal for Loudness (R-ch)
19	R-Loudness1	Terminal for Loudness (R-ch)
20	V dd	(+)Power Supply

■MN17581JSU(IC441): System Controller

1. Terminal Layout


VDD 1 64 OSC1 7.2MHZ
TCIB 2 63 OSC2 7.2MHZ
RM IN IRQ0 3 62 VSS
IRQ1 4 61 X1(TCIA)
INH P00 5 60 X2
RM-OUT P01 6 59 SYNC
DCS-IN P02 7 58 RST RESET
DCS-OUT P03 8 57 PC3/SB0A DATA
TEST P10 9 56 PC2/SB1A
P11 10 55 PC1SBTA CLK
P12 11 54 PC0/SB0B DISP-DATA
P13 12 53 PB3SBIB
P20 13 52 PB2SBTB DISP-CLK
P21 14 51 PB1
P22 15 50 PB0
P23 16 49 PA3 KEY-IN
P30 17 48 PA2 KEY-IN
P31 18 47 PA1 KEY-IN
P32 19 46 PA0 KEY-IN
P33 20 45 EXPS
P40 21 44 P93 KEY-OUT
P41 22 43 P92 KEY-OUT
CSRP P42 23 42 P91 KEY-OUT
SURROUND P43 24 41 P90 KEY-OUT
POWER P50 25 40 P83 KEY-OUT
TU-INH P51 26 39 P82 KEY-OUT
TU-MUTE P52 27 38 P81 KEY-OUT
P53 28 37 P80 KEY-OUT
CE P60 29 36 P73
STB P61 30 35 P72
SEA-DI P62 31 34 P71
SEA-CK P63 32 33 P70

2.Block Diagram


P8
P9
PA
PC
P0
P7
SBIA
SBIA
SBIA
SBIB
SBOB
SBTB
TCIB
TCOB
TCOA
X1
X2
OSC1
OSC2
SYNC
IRQ0
IRQ1
RST
VDD
VSS
Output port
Input port
Input/output port
Shift buffer A
Shift buffer B
Timer counter B
Timer counter A
Clock oscillator 1
Clock ocsillator 2
Interrupt control
User's ROM (6k x 10)
Command register
Register stack
RAM (384 x 4)
Program counter
PC Stack
Address adder section
SPH
SPH
W
F
Computa-tion section
E
A
X
Y
H
L
Register group
Instruction control section

3. Pin Function Description(MN17581JSU)

Pin No.	Symbol	Name	H/L	I/O	Functions and Operations
1	V_{DD}	V_{DD}		I	5V
2	TCIB				NOT USED
3	IRQ0	RM IN	L	I	REMOTE CONTROL SIGNAL INPUT
4	IRQ1				NOT USED
5	P00	INH	L	I	INH INPUT
6	P01	RM OUT	H	O	REMOTE CONTROL RECEIVED LED INDICATOR ON /OFF
7	P02	DCS IN	L	I	DCS SIGNAL INPUT
8	P03	DCS OUT	H	O	DCS SIGNAL OUTPUT
9	P10	TEST	L	I	TEST MODE USE FOR FACTORY PRODUCTION
10	P11		-	I	RX-401BK:CONNECT TO GND, RX-501BK:CONNECT TO 5V
11	P12		-	-	NOT USED CONNECT TO 5V
12~22	P13~P23		-	-	NOT USED CONNECT TO GND
23	P42	CSRP	H	O	CSRP LED INDICATOR ON /OFF, CSRP:COMPU-LINK SOURCE RELATED PRESET
24	P43	SURROUND	H	O	SURROUND AND SURROUND LED INDICATOR ON/OFF
25	P50	POWER	H	O	RX-401BK NOT USED, RX-501BK POWER ON/OFF
26	P51	TU-INH	L	O	INH OUTPUT TO IC421 (TC9306-034BS, TUNER CONTROLER) AND IC442 (LC7582A, LCD DRIVER)

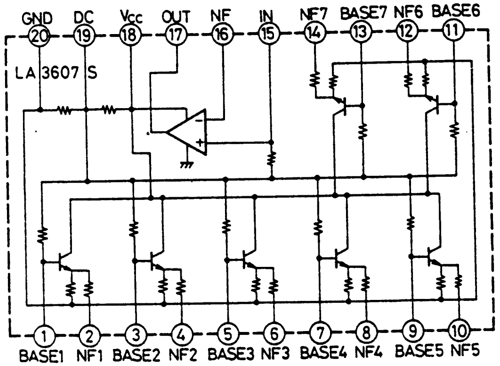
↑ "L" means "Active Low"

Pin Function Description(MN17581JSU)

Pin No.	Symbol	Name	H/L	I/O	Functions and Operations
27	P52	TU-MUTE	H	O	MUTING OUTPUT TO TUNER SIGNAL, SOURCE SELECTED EXCEPT FOR FM OR AM
28	P53				NOT USED
29	P60	CE	H	O	CE OUT TO IC442 (LC7582A, LCD DRIVER)
30	P61	STB	H	O	STB OUT TO IC302 (TC9164N, SOURCE SELECTOR) AND IC361 (TC9177P, VOLUME)
31	P62	SEA-DI		O	SERIAL DATA OUT TO IC504 (LC7522, SEA CONTROLLER)
32	P63	SEA-CK		O	SERIAL CLOCK OUT TO IC504 (LC7522, SEA CONTROLLER)
33~36	P70~P73	KEY-OUT			NOT USED
37~40	P80~P83	KEY-OUT	L	O	KEY MATRIX OUTPUT
41~44	P90~P93	KEY-OUT	L	O	KEY MATRIX OUTPUT
45	EXP				NOT USED
46~49	PA0~PA3	KEY-IN			KEY MATRIX INPUT
50~51	PB0~PB1				NOT USED
52	PB2SBTB	DISP- CLK		O	SERIAL CLOCK OUT TO IC442 (LC7582A, LCD DRIVER)
53	PB3SBIB				NOT UESD
54	PC0/SB0B	DISP- DATA		O	SERIAL DATA OUT TO IC442 (LC7582A, LCD DRIVER)
55	PC1SBTA	CLK		O	SERIAL CLOCK OUT TO IC302 (TC9164N, SOURCE SELECTOR) AND IC361 (TC9177P, VOLUME)
56	PC2/SB1A				NOT USED
57	PC3/SB0A	DATA		O	SERIAL DATA OUT TO IC302 (TC9164N, SOURCE SELECTOR) AND IC361 (TC9177P, VOLUME)
58	RST	RESET	L	I	RESET SIGNAL INPUT
59	SYNC				NOT USED
60	X2				NOT USED
61	X1(TCIA)				NOT USED
62	V_{SS}				GND
63	OSC2	OSC2		O	CONNECT 7.2MHZ RESONATOR
64	OSC1	OSC1		I	CONNECT 7.2MHZ RESONATOR

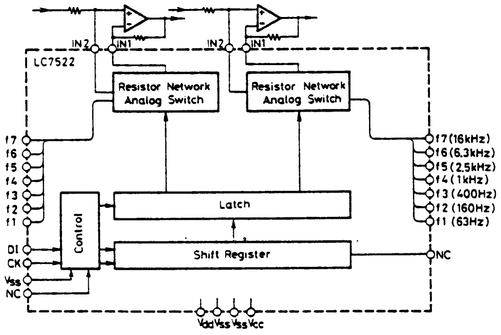
↑ "L" means "Active Low"

■ LA3607S (IC501, IC502): 7-segments SEA Equalizer.

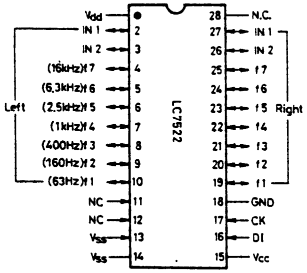

GND ⑳
DC ⑲
Vcc ⑱
OUT ⑰
NF ⑯
IN ⑮
NF7 ⑭
BASE7 ⑬
NF6 ⑫
BASE6 ⑪
LA3607S
① BASE1
② NF1
③ BASE2
④ NF2
⑤ BASE3
⑥ NF3
⑦ BASE4
⑧ NF4
⑨ BASE5
⑩ NF5

■ LC7522(IC504):SEA Controller

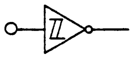
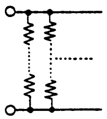
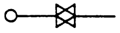
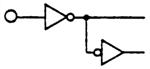
1. Block Diagram


IN2
IN1
IN2
IN1
LC7522
Resistor Network Analog Switch
Resistor Network Analog Switch
f7
f6
f5
f4
f3
f2
f1
f7(16kHz)
f6(6.3kHz)
f5(2.5kHz)
f4(1kHz)
f3(400Hz)
f2(160Hz)
f1(63Hz)
Latch
Control
Shift Register
DI
CK
Vss
NC
NC
Vdd Vss Vss Vcc

2. Terminal Layout

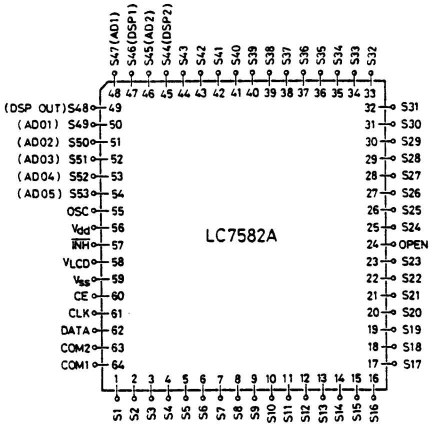

Vdd 1
IN 1 2
IN 2 3
(16kHz)f7 4
(6.3kHz)f6 5
(2.5kHz)f5 6
(1kHz)f4 7
(400Hz)f3 8
(160Hz)f2 9
(63Hz)f1 10
NC 11
NC 12
Vss 13
Vss 14
Left
LC7522
28 N.C.
27 IN 1
26 IN 2
25 f7
24 f6
23 f5
22 f4
21 f3
20 f2
19 f1
18 GND
17 CK
16 DI
15 Vcc
Right

3. Terminal Functions

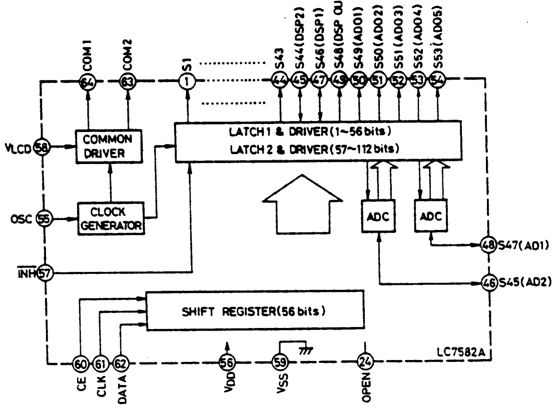
Name	Number	Terminal type	Explanation
V DD V ref V SS V EE	1 15 18 14	-----	+7V power supply for audio signal +5V power supply for operating the microcomputer 0V -7V power supply for audio signal
DI	16		For data input from CPU (Schmitt inverter type)
CLK	17		For clock input from CPU(Schmitt inverter type)
GND	---	-----	Audio signal line GND
IN1	2, 27		For audio signal input IN1 connected to the inversion input of the operation amplifier
IN2	3, 26		IN2 connected to the non-inversion input of the operation amplifier Provided for both left and right channels.
f1~f7	10~4, 19~25		For connection to the band pass filter f1~f7 for left and right channels (total 14)
S	13		Select terminal when using 2 chips 7C3 is connected to Vdd with key code "1" input 7C2 is connected to Vee with key code "0" input

■ LC7582A(IC442): LCD Driver

1. Terminal Layout


S47(AD1) 48
S46(DSP1) 47
S45(AD2) 46
S44(DSP2) 45
S43 44
S42 43
S41 42
S40 41
S39 40
S38 39
S37 38
S36 37
S35 36
S34 35
S33 34
S32 33
(DSP OUT)S48 49
(AD01) S49 50
(AD02) S50 51
(AD03) S51 52
(AD04) S52 53
(AD05) S53 54
OSC 55
Vdd 56
INH 57
VLCD 58
Vss 59
CE 60
CLK 61
DATA 62
COM2 63
COM1 64
LC7582A
32 S31
31 S30
30 S29
29 S28
28 S27
27 S26
26 S25
25 S24
24 OPEN
23 S23
22 S22
21 S21
20 S20
19 S19
18 S18
17 S17
1 S1
2 S2
3 S3
4 S4
5 S5
6 S6
7 S7
8 S8
9 S9
10 S10
11 S11
12 S12
13 S13
14 S14
15 S15
16 S16

2. Block Diagram

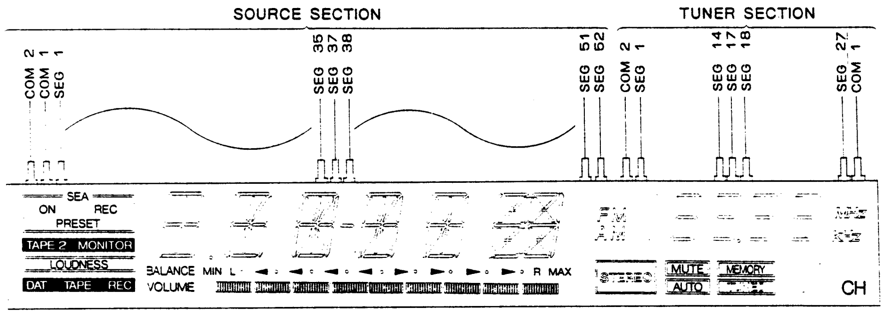

COM1
COM2
S1
S43
S44(DSP2)
S46(DSP1)
S48(DSP OUT)
S49(AD01)
S50(AD02)
S51(AD03)
S52(AD04)
S53(AD05)
64
63
1
44
45
47
49
50
51
52
53
54
VLCD 58
COMMON DRIVER
LATCH 1 & DRIVER(1~56 bits)
LATCH 2 & DRIVER(57~112 bits)
OSC 55
CLOCK GENERATOR
ADC
ADC
48 S47(AD1)
46 S45(AD2)
INH 57
SHIFT REGISTER(56 bits)
LC7582A
60 CE
61 CLK
62 DATA
56 VDD
59 VSS
24 OPEN

3. Terminal Functions

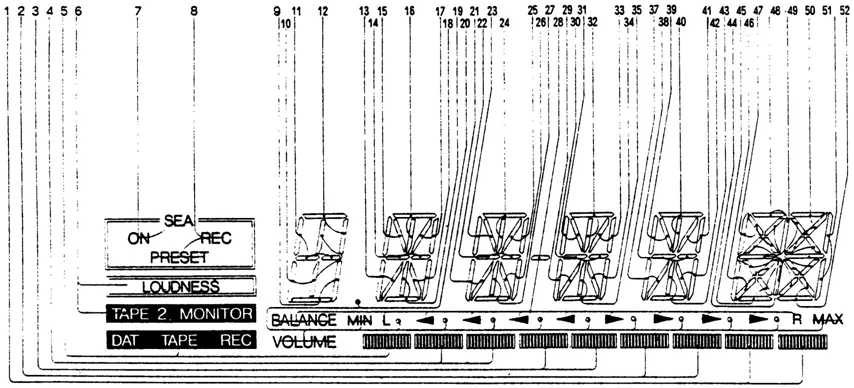
Terminal name	Terminal Function
S1 ~ S43 S46(DSP1), S44(DSP2) S47(AD1), S45(AD2) S48(DSP OUT) S49 ~ S53 (AD0 ~ AD5)	Segment output terminals Segment output or DSP input terminals Segment output or AD input terminals Segment output or DSP output terminal Segment output or AD output terminals
COM 1,2 OSC CE, CLK, DATA Vdd, Vcc	Common output terminals (only COM 1 is used at the time of 1/1 duty, at which time COM 2 is open.) Oscillator terminal Input terminals for serial data transmission Power supply terminals
$\overline{\text{INH}}$ OPEN	Input terminal for extinguishing and lighting the display (Effective only for the output driver. Therefore, serial data can be sent during extinguishing and lighting.) Unconnected

Internal Wiring of LCD (LC441:ELU0002-052)

■ Terminal Layout


SOURCE SECTION
TUNER SECTION
COM 2
COM 1
SEG 1
SEG 35
SEG 37
SEG 38
SEG 51
SEG 52
COM 2
SEG 1
SEG 14
SEG 17
SEG 18
SEG 27
COM 1
SEA
ON
REC
PRESET
TAPE 2 MONITOR
LOUDNESS
DAT TAPE REC
BALANCE MIN L
R MAX
VOLUME
FM
AM
MHz
kHz
STEREO
MUTE
MEMORY
AUTO
CH

■ Source Section

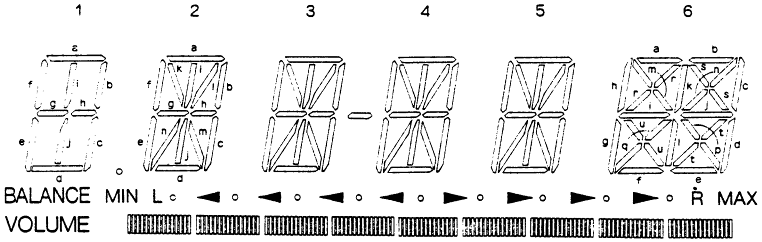

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52
SEA
ON
REC
PRESET
LOUDNESS
TAPE 2 MONITOR
DAT TAPE REC
BALANCE MIN L
R MAX
VOLUME

Common 1/2	Segment												
	1	2	3	4	5	6	7	8	9	10	11	12	13
1	▥ (8:MAX)	▥ (6)	▥ (4)	▥ (2)	▥ (0:MIN)	LOUDNESS	SEA	REC	1d	1e	1f	1a	2e
2	▥ (7)	▥ (5)	▥ (3)	▥ (1)	DAT/TAPE REC	TAPE 2 MONITOR	ON	PRESET	1C	1j,1j	1g,1h	1b	2n

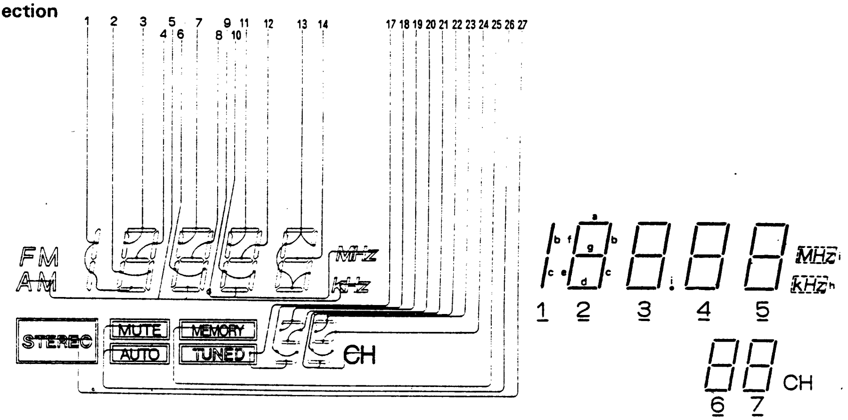
Common 1/2	Segment												
	14	15	16	17	18	19	20	21	22	23	24	25	26
1	2g	2f	2a	2b	2c	2d	○	3e	3g	3f	3a	3b	3c
2	2h	2k	2j	2ℓ	2m	2j	VOLUME MIN······MAX	3n	3h	3k	3i	3ℓ	3m

Common 1/2	Segment												
	27	28	29	30	31	32	33	34	35	36	37	38	39
1	3d		4e	4g	4f	4a	4b	4c	4d	—	5e	5g	5f
2	3j	BALANCE L◀◀◀◀▶▶▶▶R	4n	4h	4k	4i	4ℓ	4m	4j	—	5n	5h	5k

Common 1/2	Segment												
	40	41	42	43	44	45	46	47	48	49	50	51	52
1	5a	5b	5c	5d	6ℓ	6f	6g	6h	6a	6j	6b	6d	6e
2	5j	5ℓ	5m	5j	6j	6r,6u	6q	6m	6k	6s	6s,6t	6c	6p


1
2
3
4
5
6
a b c d e f g h i j k l m n p q r s t u
BALANCE MIN L
R MAX
VOLUME

■ Tuner Section

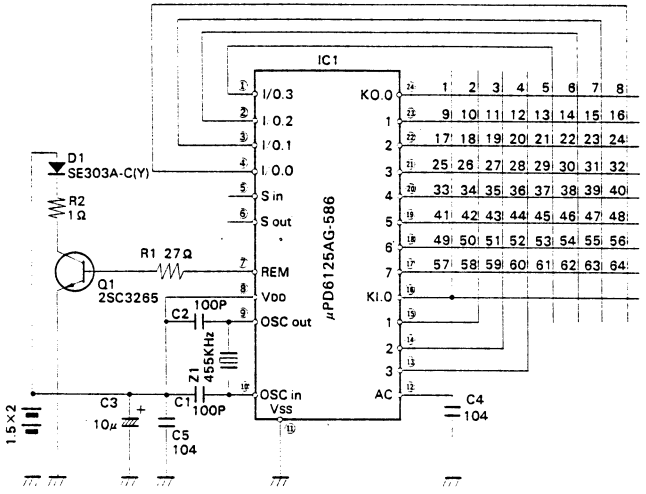

1 2 3 4 5 6 7 8 9 10 11 12 13 14 17 18 19 20 21 22 23 24 25 26 27
FM
AM
MHz
kHz
STEREO
MUTE
AUTO
MEMORY
TUNED
CH
a b c d e f g
1
2
3
4
5
6
7
CH

Common 1/2	Segment												
	1	2	3	4	5	6	7	8	9	10	11	12	13
1	2d	2e	2f	2g	3d	3e	3f	3g	4d	4e	4f	4g	5a,5c, 5d,5f
2	1b,1c	2c	2a	2b	AM.KHz	3c	3a	3b	FM.MHz (point of frequency)	4c	4a	4b	5b,5e

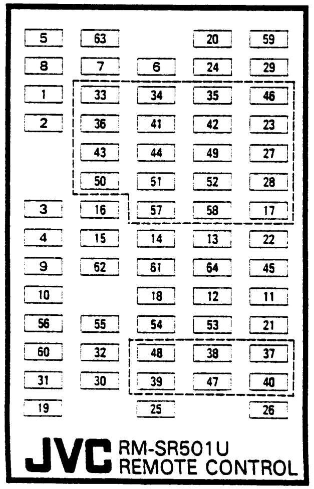
Common 1/2	Segment													
	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1				6d	6e	6f	6g	7d	7e	7f	7g	MEMORY	MUTE AUTO	STEREO
2	5g			TUNED	6c	6a	6b	ch (Light on at any time)	7c	7a	7b			

Remote Control Unit (RM-SR401U)

■ Schematic Diagram


IC1
I/O.3
I.O.2
I/O.1
I.O.0
S in
S out
REM
VDD
OSC out
OSC in
Vss
KO.0
KI.0
AC
μPD6125AG-586
D1
SE303A-C(Y)
R2
1Ω
R1 27Ω
Q1
2SC3265
C2
100P
Z1
455KHz
C1
100P
C3
10μ
C5
104
C4
104
1.5×2

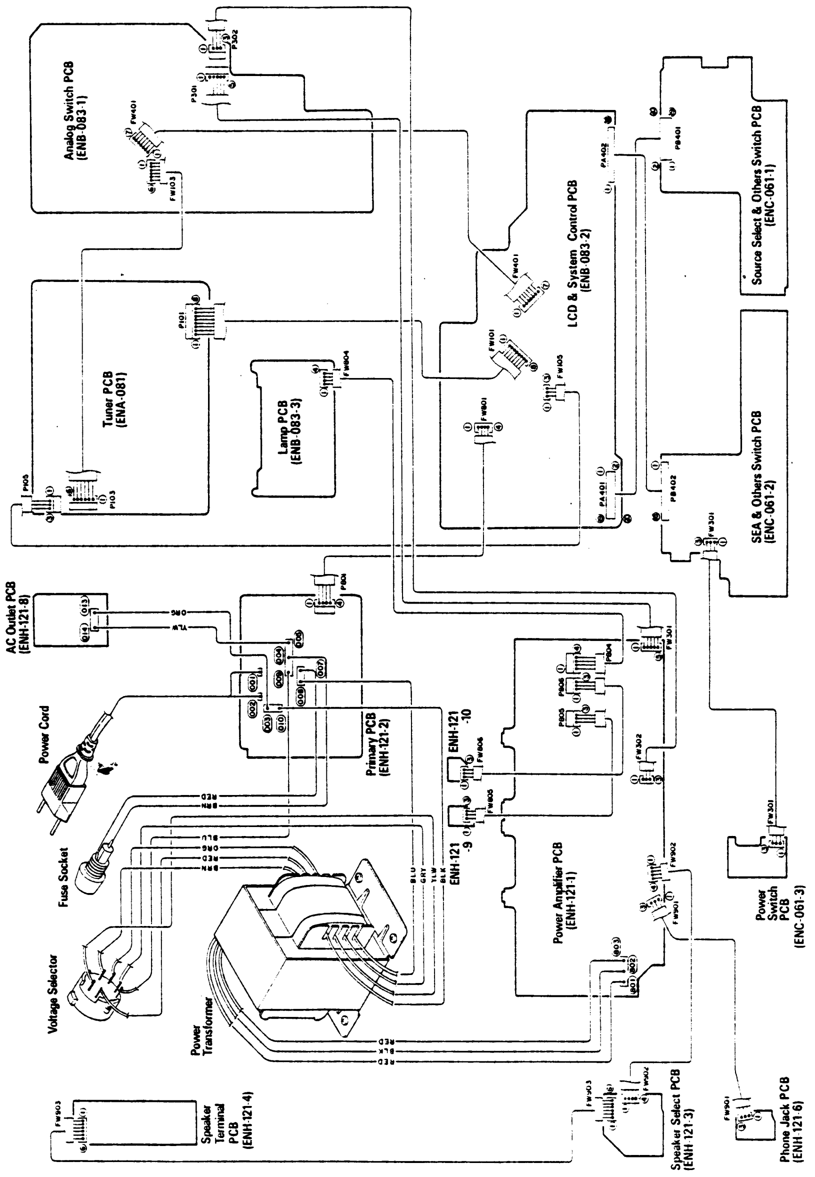
■ Key Layout


5 63 20 59
8 7 6 24 29
1 33 34 35 46
2 36 41 42 23
43 44 49 27
50 51 52 28
3 16 57 58 17
4 15 14 13 22
9 62 61 64 45
10 18 12 11
56 55 54 53 21
60 32 48 38 37
31 30 39 47 40
19 25 26
JVC RM-SR501U
REMOTE CONTROL

■ Parts List

Symbol	Parts Name	Parts No./Rating
R2	Carbon Resistor	1.0Ω, 1/4 V
R1	Carbon Resistor	27Ω, 1/8 V
D1	Infrared LED	SE303A-Y
C5	Ceramic Capacitor	0.1μF
C4	Ceramic Capacitor	0.1μF
C3	Electoro Capacitor	10μF, 16V
C2	Ceramic Capacitor	100PF
C1	Ceramic Capacitor	100PF
Z1	Ceramic Oscillator	CBS455EB20
Q1	Transistor	2SC3265
IC1	I. C.	μPD6125AG-586

Connection Diagram


Analog Switch PCB (ENB-083-1)
Tuner PCB (ENA-081)
Lamp PCB (ENB-083-3)
LCD & System Control PCB (ENB-083-2)
Source Select & Others Switch PCB (ENC-061-1)
SEA & Others Switch PCB (ENC-061-2)
AC Outlet PCB (ENH-121-8)
Power Cord
Fuse Socket
Voltage Selector
Power Transformer
Primary PCB (ENH-121-2)
ENH-121-10
ENH-121-9
Power Amplifier PCB (ENH-121-1)
Power Switch PCB (ENC-061-3)
Speaker Terminal PCB (ENH-121-4)
Speaker Select PCB (ENH-121-3)
Phone Jack PCB (ENH-121-6)
BLU
GRY
YLW
BLK
RED
ORG
WHT

PARTS LIST

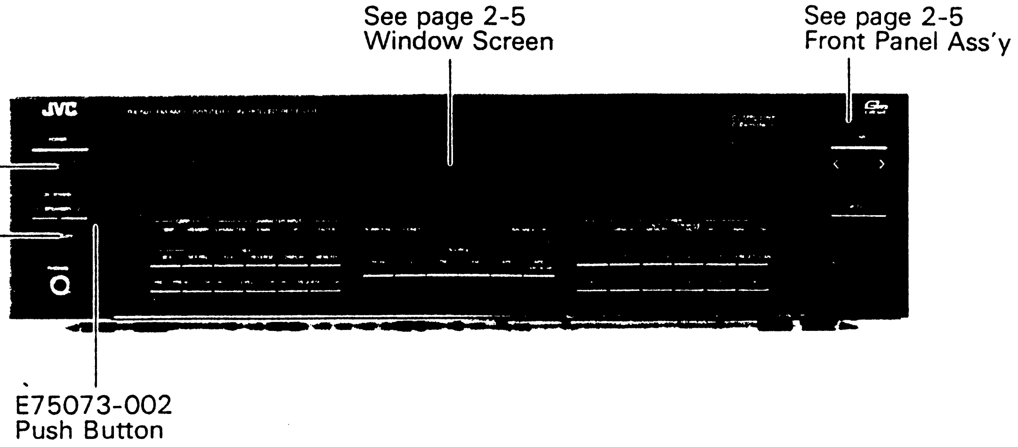
Contents

Main Parts Locations······2-2
Exploded View and Parts List······2-3
Printed Circuit Board Ass'y and Parts List······2-7
- ENH-121☐ Power Amplifier PC Board Ass'y······2-7
- ENB-083☐ Source Select & SEA Control PC Board Ass'y······2-11
- ENA-081☐ Tuner PC Board Ass'y······2-14
- ENC-061B Front Switch PC Board Ass'y······2-17

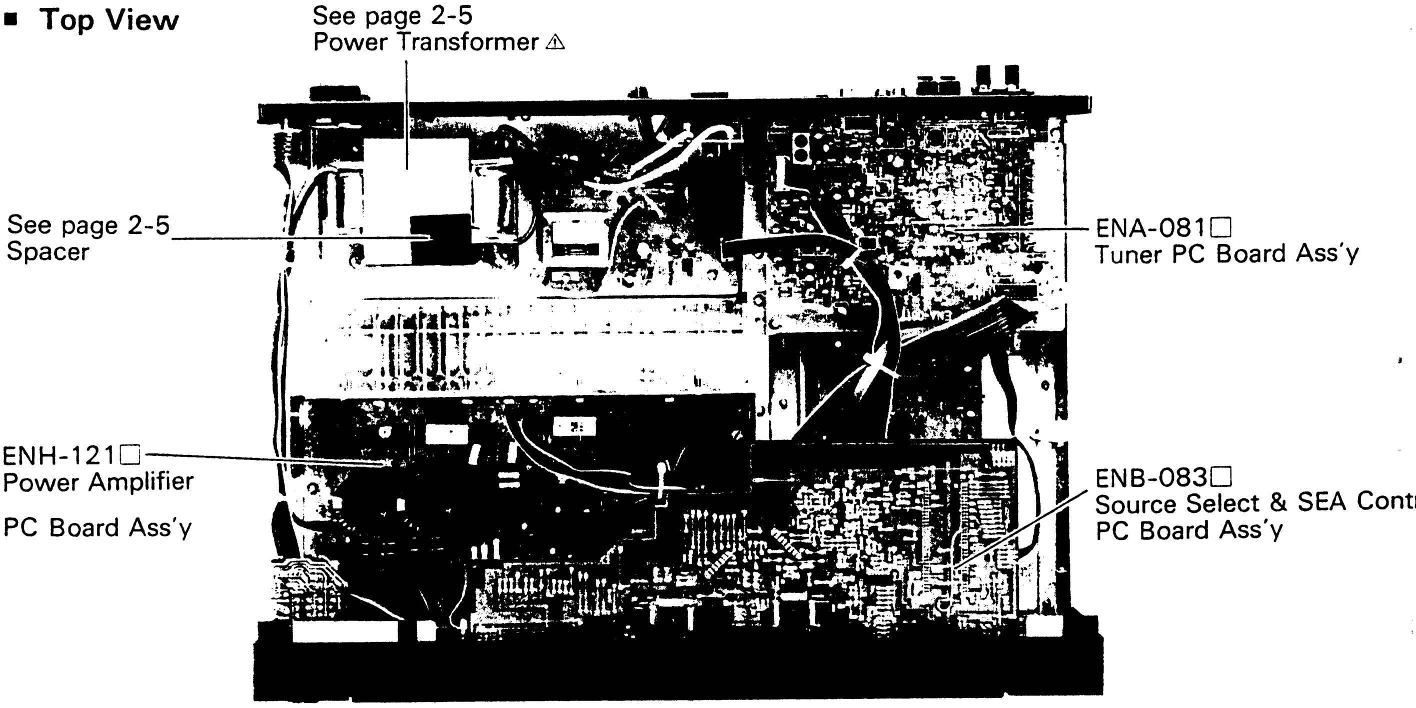
Accessories List······2-19
Packing Materials and Part Numbers······2-20

Main Parts Locations

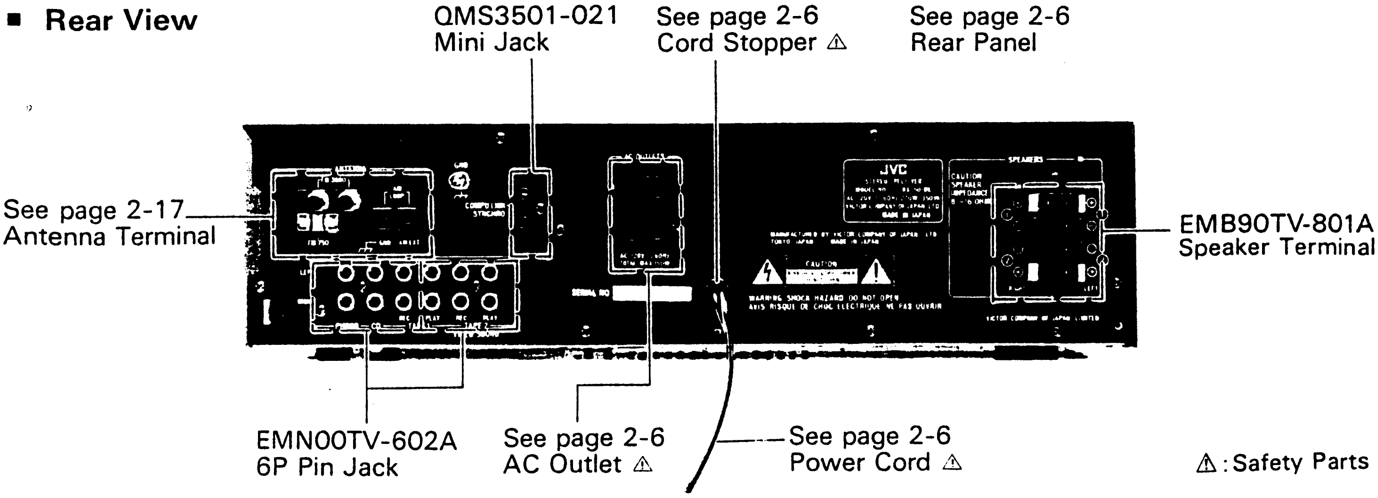
■ Front View


See page 2-5
Window Screen
See page 2-5
Front Panel Ass'y
E305741-001
Power Button
E75073-001
Push Button
E75073-002
Push Button

■ Top View

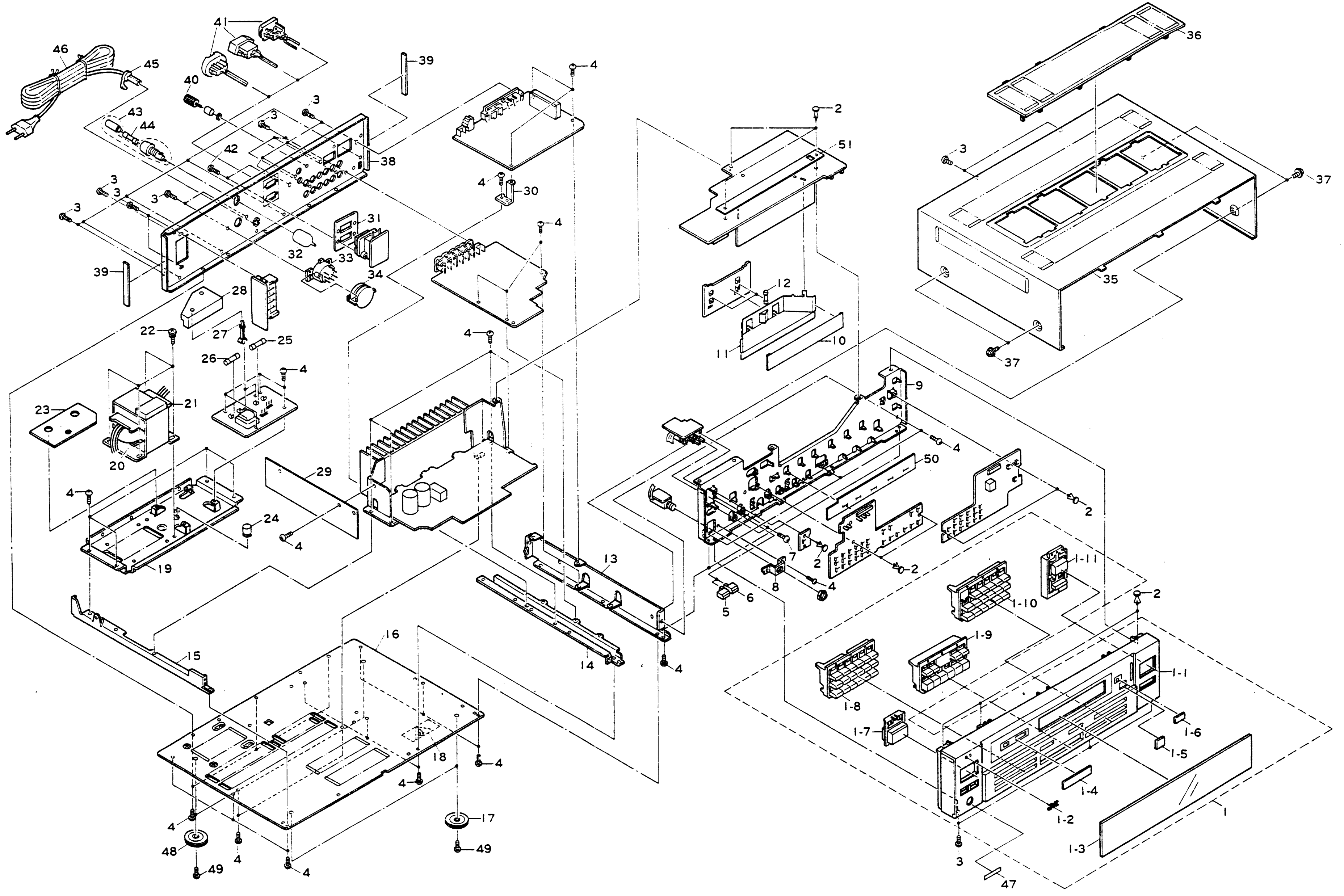

See page 2-5
Power Transformer ⚠
See page 2-5
Spacer
ENA-081☐
Tuner PC Board Ass'y
ENH-121☐
Power Amplifier
PC Board Ass'y
ENB-083☐
Source Select & SEA Cont
PC Board Ass'y

■ Rear View


QMS3501-021
Mini Jack
See page 2-6
Cord Stopper ⚠
See page 2-6
Rear Panel
See page 2-17
Antenna Terminal
EMB90TV-801A
Speaker Terminal
EMN00TV-602A
6P Pin Jack
See page 2-6
AC Outlet ⚠
See page 2-6
Power Cord ⚠

⚠ : Safety Parts

Exploded View and Parts List



46
45
41
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49
13
14
2
51
12
11
10
36
37
35
9
50
7
8
5
6
1-11
1-10
1-9
1-8
1-7
1-1
1-6
1-5
1-4
1-2
1-3
1
47

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-RX501BKE	Front Panel Ass'y	1		Except LE , LBS
		EFP-RX501LBKE	Front Panel Ass'y	1		LE , LBS
	1-1	E11860-001	Front Panel	1		Except LE , LBS
		E11860-002	Front Panel	1		LE , LBS
	1-2	E72968-001	JVC Mark	1		
	1-3	E26210-006	Window Screen	1		Except LE , LBS
		E26210-007	Window Screen	1		LE , LBS
	1-4	E75075-005	Indicator Sheet	1		
	1-5	E72436-006	Screen	1		
	1-6	E72437-006	Sheet	1		
	1-7	E305741-001	Power Button	1		
	1-8	E26212-001	Preset Button	1		
	1-9	E26213-001	Source Button	1		
	1-10	E26212-002	Preset Button	1		
	1-11	E305742-001	Volume Button	1		
	2	E48729-008	Plastic Rivet	11		
	3	SBSG3008M	Screw	19		Except G , U , P , PG
		SBSG3008M	Screw	20		G
		SBSG3008M	Screw	21		U , P , PG
	4	SBSG3008CC	Screw	40		
	5	E75073-001	Push Button	1	Left	
	6	E75073-002	Push Button	1	Right	
	7	SBST3006CC	Screw	2		
	8	E75143-001	Hed Phon Bracket	1		
	9	E11862-001	Front Bracket	1		
	10	E74416-004	Sheet	1		
	11	E305753-001	Lamp Holder	1		
⚠	12	ELP4101-003	Fuse Lamp	2		
	13	E305745-001	Side Bracket	1	Right	
	14	E305746-001	Center Bracket	1		
	15	E304583-002	Side Bracket	1	Left	
	16	E11424-003	Bottom Plate	1		
	17	E75088-001	Foot	2	Front	
	18	E70281-001	Caution Label	1		J
	19	E25572-001	Trans Bracket	1		
⚠	20	ETP1150-32JA	Power Transformer	1		J , C
⚠		ETP1150-32FA	Power Transformer	1		U , P , PG
⚠		ETP1150-32EA	Power Transformer	1		A , LE
⚠		ETP1150-32XA	Power Transformer	1		G
⚠		ETP1150-32EABS	Power Transformer	1		LBS
	21	E3400-382	Spacer	1		Except J , C
		E3400-374	Spacer	1		J , C
	22	E65389-002	Special Screw	4		
	23	E74407-001	Primary Sheet	1		G , A , LE , LBS
	24	E49383-002	Fastener	1		
⚠	25	QMF51U1-4R0S	Fuse	1	F001	J , C
⚠		QMF51E2-2R0J1	Fuse	1	F001	G , A , LE
⚠		QMF51E2-2R0J1BS	Fuse	1	F001	LBS
⚠	26	QMF51E2-R10J1	Fuse	1	F002	G , A , LE
⚠		QMF51E2-R10J1BS	Fuse	1	F002	LBS
	27	E302321-001	Fastener	2		A , G , LE , LBS
	28	E304654-003	Primary Cover	1		A , G , LE , LBS
	29	E73937-001	Sheet	1		
	30	E75074-001	Circuit Board Bracket	1		
	31	E69589-008	Spacer	1	AC Outlet	J
	32	E69291-001	Fuse Cover	1		U , P , PG , LE
⚠	33	QSR0085-008U	Voltage Selector	1		U , P , PG
	34	E302764-001	Voltage Selector Cover	1		U , P , PG
	35	E25834-003	Metal Cover	1		Except LE , LBS
		E25835-003	Metal Cover	1		LE , LBS

⚠: Safety Parts

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	36	E23862-005	Grill	1		LE , LBE
	37	E61660-004	Special Screw	4		
	38	E26214-014	Rear Panel	1		J , C
		E26214-015	Rear Panel	1		U , P , PG
		E26214-004	Rear Panel	1		A , LBS
		E26214-010	Rear Panel	1		G
		E26214-013	Rear Panel	1		LE
	—	E306019-022	Rating Label	1		A
	—	E306019-024	Rating Label	1		LE
	39	EXO085010R10S	Spacer	2		
	40	E70078-001	GND. Terminal	1		
⚠	41	EMC0236-001	AC Outlet	1		G , LE
⚠		EMC0233-001	AC Outlet	1		A
⚠		EMC0237-001BS	AC Outlet	1		LBS
	42	SDSG3008M	Screw	2		J , C , U , P , PG
	43	QMG0301-003	Fuse Holder	1		U , P , PG , LE
⚠	44	QMF51E2-2R0J1	Fuse	1		U , PG
⚠		QMF51E2-4R0J1	Fuse	1		P
⚠		QMF51E2-1R25J1	Fuse	1		LE
⚠	45	QHS3876-162	Cord Stopper	1		Except LBS
⚠		QHS3876-162BS	Cord Stopper	1		LBS
⚠	46	QMP1480-200	Power Cord	1		J , C
⚠		QMP7600-200	Power Cord	1		U , P , PG
⚠		QMP3900-200	Power Cord	1		G , LE
⚠		QMP2560-244	Power Cord	1		A
⚠		QMP9017-008BS	Power Cord	1		LBS
	47	E49267-001	Oligin Marking Label	1		LBS
	48	E75088-002	Foot	2	Rear	
	49	SBST3008Z	Screw	4		
	50	E75308-001	Blind Sheet	1	Front Bracket	
	51	E306157-001	Blind Sheet	1		

⚠: Safety Parts

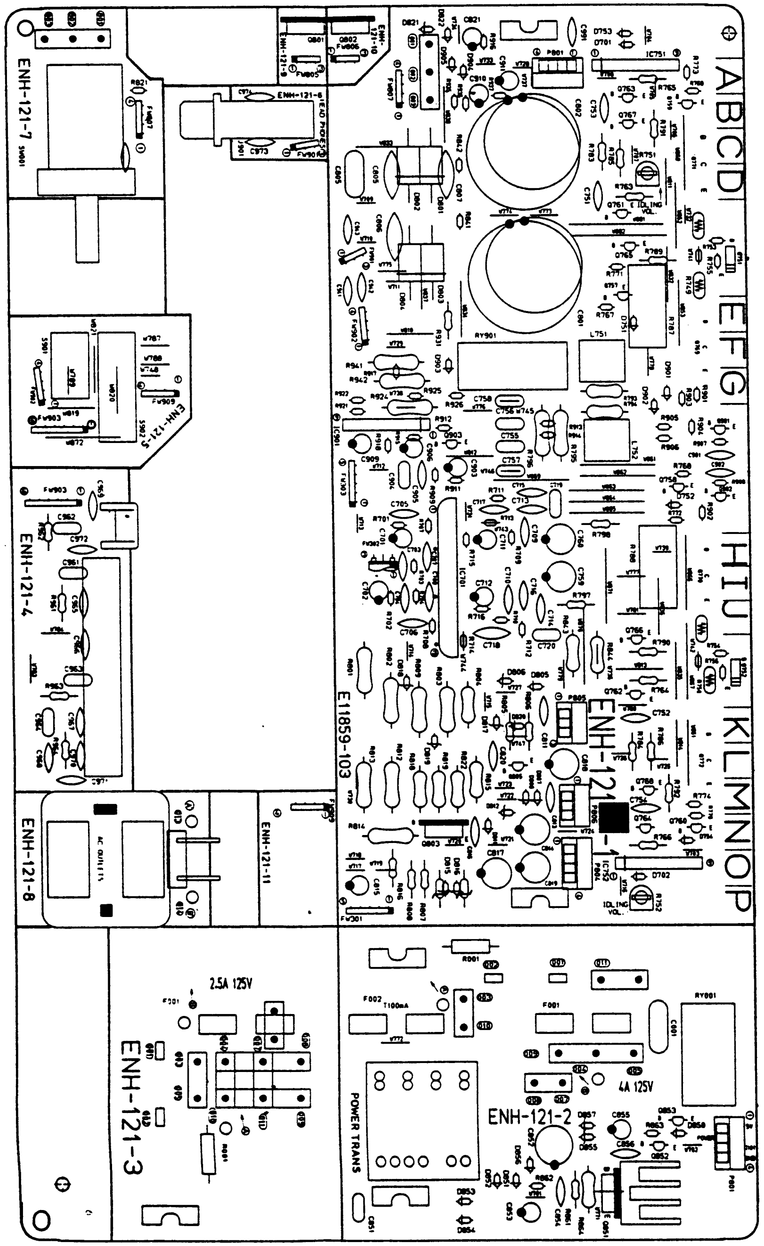
The Marks for Designated Areas.

J……………………………The U.S.A
C……………………………Canada
A……………………………Australia
G……………………West Germany
LE…………Continental Europe(with LW)
LBS……………………………………U.K.
P , PG………………………U.S.Military Market
U……………………………Other Countries
NO mark indicates all areas.

Printed Circuit Board Ass'y and Parts List

■ ENH-121□ Power Amplifier PC Board Ass'y

Note: ENH-121□ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
ENH-121I	the U.S.A.
ENH-121J	Canada
ENH-121K	Other Countries
ENH-121L	Australia, Europe (with LW)
ENH-121MBS	U.K. (with LW)
ENH-121N	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q751	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q752	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q757	2SC945A(P,Q)	SILICON	NEC	
	Q758	2SC945A(P,Q)	SILICON	NEC	
	Q759	2SA733A(P,Q)	SILICON	NEC	
	Q760	2SA733A(P,Q)	SILICON	NEC	
	Q761	2SC1775AV(E)	SILICON	HITACHI	
	Q762	2SC1775AV(E)	SILICON	HITACHI	
	Q763	2SA872AV(E)	SILICON	HITACHI	
	Q764	2SA872AV(E)	SILICON	HITACHI	
	Q765	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q766	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q767	2SA965(O,Y)	SILICON	TOSHIBA	
	Q768	2SA965(O,Y)	SILICON	TOSHIBA	
	Q769	2SD2155LB(R,O)	SILICON	TOSHIBA	
	Q770	2SD2155LB(R,O)	SILICON	TOSHIBA	
	Q771	2SB1429LB(R,O)	SILICON	TOSHIBA	
	Q772	2SB1429LB(R,O)	SILICON	TOSHIBA	
	Q801	2SB941A(P,Q)	SILICON	MATSUSHITA	
	Q802	2SD1266(P,Q)	SILICON	MATSUSHITA	
	Q803	2SD1266(P,Q)	SILICON	MATSUSHITA	
	Q805	2SA965(O,Y)	SILICON	TOSHIBA	
	Q851	2SD1265A(O)	SILICON	MATSUSHITA	K
	Q852	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q853	DTC114YS	SILICON	ROHM	
	Q901	2SC1775AV(E,F)	SILICON	HITACHI	
	Q902	2SC1775AV(E,F)	SILICON	HITACHI	
	Q903	2SA872AV(E,F)	SILICON	HITACHI	

⚠ : SAFETY PARTS

ICs

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC701	STK3082MK3V	I.C.	SANYO	
	IC751	VC5022-2	I.C.	SANYO	
	IC752	VC5022-2	I.C.	SANYO	
	IC901	TA7317P	I.C.	TOSHIBA	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D701	1SS133	SILICON	ROHM	
	D702	1SS133	SILICON	ROHM	
	D751	1SS133	SILICON	ROHM	
	D752	1SS133	SILICON	ROHM	
	D753	1SS133	SILICON	ROHM	
	D754	1SS133	SILICON	ROHM	
	D801	30DF2SFC	SILICON	NIHONINTER	N
	D801	30D2FC	SILICON	NIHONINTER	I
	D801	30D2FC	SILICON	NIHONINTER	J
	D801	30D2FC	SILICON	NIHONINTER	K
	D801	30D2FC	SILICON	NIHONINTER	L
	D801	30D2FC	SILICON	NIHONINTER	MBS
	D802	30DF2SFC	SILICON	NIHONINTER	N
	D802	30D2FC	SILICON	NIHONINTER	I
	D802	30D2FC	SILICON	NIHONINTER	J
	D802	30D2FC	SILICON	NIHONINTER	K
	D802	30D2FC	SILICON	NIHONINTER	L
	D802	30D2FC	SILICON	NIHONINTER	MBS
	D803	30DF2SFC	SILICON	NIHONINTER	N
	D803	30D2FC	SILICON	NIHONINTER	I
	D803	30D2FC	SILICON	NIHONINTER	J
	D803	30D2FC	SILICON	NIHONINTER	K
	D803	30D2FC	SILICON	NIHONINTER	L
	D803	30D2FC	SILICON	NIHONINTER	MBS
	D804	30DF2SFC	SILICON	NIHONINTER	N
	D804	30D2FC	SILICON	NIHONINTER	I
	D804	30D2FC	SILICON	NIHONINTER	J
	D804	30D2FC	SILICON	NIHONINTER	K
	D804	30D2FC	SILICON	NIHONINTER	L
	D804	30D2FC	SILICON	NIHONINTER	MBS
	D805	1SS133	SILICON	ROHM	
	D806	RD24JSB3	ZENER	NEC	
	D807	1SS133	SILICON	ROHM	
	D808	MTZ16JC	ZENER	ROHM	I
	D808	MTZ16JC	ZENER	ROHM	J
	D808	MTZ16JC	ZENER	ROHM	K
	D808	RD16JSB3	ZENER	NEC	L
	D808	RD16JSB3	ZENER	NEC	MBS
	D808	RD16JSB3	ZENER	NEC	N
	D811	1SS133	SILICON	ROHM	
	D812	MTZ6.2JC	ZENER	ROHM	
	D815	MTZ12JC	ZENER	ROHM	I
	D815	MTZ12JC	ZENER	ROHM	J
	D815	MTZ12JC	ZENER	ROHM	K
	D815	RD12EB3	ZENER	NEC	L
	D815	RD12EB3	ZENER	NEC	MBS
	D815	RD12EB3	ZENER	NEC	N
	D816	MTZ12JC	ZENER	ROHM	I
	D816	MTZ12JC	ZENER	ROHM	J
	D816	MTZ12JC	ZENER	ROHM	K
	D816	RD12EB3	ZENER	NEC	L
	D816	RD12EB3	ZENER	NEC	MBS
	D816	RD12EB3	ZENER	NEC	N
	D817	MTZ16JC	ZENER	ROHM	
	D818	MTZ12JC	ZENER	ROHM	L
	D818	MTZ12JC	ZENER	ROHM	MBS
	D818	MTZ12JC	ZENER	ROHM	N
	D819	MTZ12JC	ZENER	ROHM	L
	D819	MTZ12JC	ZENER	ROHM	MBS
	D819	MTZ12JC	ZENER	ROHM	N
	D820	1SS133	SILICON	ROHM	
	D851	ERA15-02L19	SILICON	JRC	
	D852	ERA15-02L19	SILICON	JRC	
	D853	ERA15-02L19	SILICON	JRC	
	D854	ERA15-02L19	SILICON	JRC	
	D855	MTZ12JC	ZENER	ROHM	K
	D856	1SS133	SILICON	ROHM	
	D857	RD5.6JSB3	ZENER	NEC	
	D858	1SS133	SILICON	ROHM	
	D901	1SS133	SILICON	ROHM	
	D902	1SS133	SILICON	ROHM	
	D903	1SS133	SILICON	ROHM	
	D904	1SS133	SILICON	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C001	QCZ9019-472BS	4700PF		CERAMIC	MBS
	C701	QETB1HM-106	10MF	50V	ELECTRO	
	C702	QETB1HM-106	10MF	50V	ELECTRO	
	C703	QCS21HJ-101	100PF	50V	CERAMIC	
	C704	QCS21HJ-101	100PF	50V	CERAMIC	
	C705	QCS21HJ-101	100PF	50V	CERAMIC	
	C706	QCS21HJ-101	100PF	50V	CERAMIC	
	C707	QCY21HK-821	820PF	50V	CERAMIC	
	C708	QCY21HK-821	820PF	50V	CERAMIC	
	C709	QCS21HJ-220	22PF	50V	CERAMIC	
	C710	QCS21HJ-220	22PF	50V	CERAMIC	
	C711	QETB1AM-107	100MF	10V	ELECTRO	
	C712	QETB1AM-107	100MF	10V	ELECTRO	
	C713	QCS21HJ-680	68PF	50V	CERAMIC	
	C714	QCS21HJ-680	68PF	50V	CERAMIC	
	C715	QCS21HJ-680	68PF	50V	CERAMIC	
	C716	QCS21HJ-680	68PF	50V	CERAMIC	
	C717	QCS21HJ-120	12PF	50V	CERAMIC	
	C718	QCS21HJ-120	12PF	50V	CERAMIC	
	C719	QFN81HK-472	4700PF	50V	MYLAR	
	C720	QFN81HK-472	4700PF	50V	MYLAR	
	C751	QCS21HJ-470	47PF	50V	CERAMIC	
	C752	QCS21HJ-470	47PF	50V	CERAMIC	
	C753	QCS21HJ-470	47PF	50V	CERAMIC	
	C754	QCS21HJ-470	47PF	50V	CERAMIC	
	C755	QFN81HK-223	0.022MF	50V	MYLAR	I
	C755	QFN81HK-223	0.022MF	50V	MYLAR	K
	C755	QFN81HK-473	0.047MF	50V	MYLAR	J
	C755	QFN81HK-473	0.047MF	50V	MYLAR	L
	C755	QFN81HK-473	0.047MF	50V	MYLAR	MBS

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C755	QFN81HK-473	0.047MF	50V	MYLAR	N
	C756	QFN81HK-223	0.022MF	50V	MYLAR	I
	C756	QFN81HK-223	0.022MF	50V	MYLAR	K
	C756	QFN81HK-473	0.047MF	50V	MYLAR	J
	C756	QFN81HK-473	0.047MF	50V	MYLAR	L
	C756	QFN81HK-473	0.047MF	50V	MYLAR	MBS
	C756	QFN81HK-473	0.047MF	50V	MYLAR	N
	C757	QFN81HK-473	0.047MF	50V	MYLAR	J
	C757	QFN81HK-473	0.047MF	50V	MYLAR	L
	C757	QFN81HK-473	0.047MF	50V	MYLAR	MBS
	C757	QFN81HK-473	0.047MF	50V	MYLAR	N
	C758	QFN81HK-473	0.047MF	50V	MYLAR	J
	C758	QFN81HK-473	0.047MF	50V	MYLAR	L
	C758	QFN81HK-473	0.047MF	50V	MYLAR	MBS
	C758	QFN81HK-473	0.047MF	50V	MYLAR	N
	C759	QETB2AM-476	47MF	100V	ELECTRO	
	C760	QETB2AM-476	47MF	100V	ELECTRO	
	C801	QEZ0075-878E	8700MF	56V	ELECTRO	
	C802	QEZ0075-878E	8700MF	56V	ELECTRO	
	C805	QCE22HP-103	0.01MF	500V	CERAMIC	I
	C805	QCE22HP-103	0.01MF	500V	CERAMIC	J
	C805	QCE22HP-103	0.01MF	500V	CERAMIC	K
	C805	QFN82CK-104	0.1MF	160V	MYLAR	L
	C805	QFN82CK-104	0.1MF	160V	MYLAR	MBS
	C805	QFN82CK-104	0.1MF	160V	MYLAR	N
	C806	QCE22HP-103	0.01MF	500V	CERAMIC	
	C807	QCE22HP-103	0.01MF	500V	CERAMIC	
	C811	QCF21HP-472	4700PF	50V	CERAMIC	
	C813	QCF21HP-472	4700PF	50V	CERAMIC	
	C814	QETB1EM-107	100MF	25V	ELECTRO	I
	C814	QETB1EM-107	100MF	25V	ELECTRO	J
	C814	QETB1EM-107	100MF	25V	ELECTRO	K
	C814	QETB1VM-107	100MF	35V	ELECTRO	L
	C814	QETB1VM-107	100MF	35V	ELECTRO	MBS
	C814	QETB1VM-107	100MF	35V	ELECTRO	N
	C815	QETB1EM-107	100MF	25V	ELECTRO	
	C816	QCF21HP-472	4700PF	50V	CERAMIC	
	C817	QETB1EM-107	100MF	25V	ELECTRO	
	C818	QETB1EM-107	100MF	25V	ELECTRO	
	C819	QETB1EM-107	100MF	25V	ELECTRO	
	C820	QCF21HP-472	4700PF	50V	CERAMIC	
	C851	QFN32AK-223	0.022MF	100V	MYLAR	
	C852	QETB1EM-477	470MF	25V	ELECTRO	I
	C852	QETB1EM-477	470MF	25V	ELECTRO	J
	C852	QETB1EM-477	470MF	25V	ELECTRO	L
	C852	QETB1EM-477	470MF	25V	ELECTRO	MBS
	C852	QETB1EM-477	470MF	25V	ELECTRO	N
	C852	QETB1JM-227	220MF	63V	ELECTRO	K
	C853	QETB1HM-225	2.2MF	50V	ELECTRO	
	C854	QCF21HP-472	4700PF	50V	CERAMIC	K
	C855	QETB1CM-476	47MF	16V	ELECTRO	
	C856	QCF21HP-472	4700PF	50V	CERAMIC	
	C901	QCF21HP-223	0.022MF	50V	CERAMIC	
	C902	QCF21HP-223	0.022MF	50V	CERAMIC	
	C903	QETB1HM-226	22MF	50V	ELECTRO	
	C904	QFN81HK-223	0.022MF	50V	MYLAR	
	C905	QCY21HK-102	1000PF	50V	CERAMIC	
	C906	QETB1AM-476	47MF	10V	ELECTRO	
	C909	QETB1CM-226	22MF	16V	ELECTRO	
	C910	QETB1HM-225	2.2MF	50V	ELECTRO	
	C941	QCS21HJ-331	330PF	50V	CERAMIC	
	C942	QCS21HJ-331	330PF	50V	CERAMIC	
	C943	QCF21HP-223	0.022MF	50V	CERAMIC	
	C961	QFN81HK-103	0.01MF	50V	MYLAR	N
	C962	QFN81HK-103	0.01MF	50V	MYLAR	N
	C963	QFN81HK-103	0.01MF	50V	MYLAR	N
	C964	QFN81HK-103	0.01MF	50V	MYLAR	N
	C965	QCS21HJ-331	330PF	50V	CERAMIC	N
	C966	QCS21HJ-331	330PF	50V	CERAMIC	N
	C967	QCS21HJ-331	330PF	50V	CERAMIC	N
	C968	QCS21HJ-331	330PF	50V	CERAMIC	N
	C969	QCS21HJ-471	470PF	50V	CERAMIC	N
	C970	QCS21HJ-471	470PF	50V	CERAMIC	N
	C971	QCS21HJ-471	470PF	50V	CERAMIC	N
	C972	QCS21HJ-471	470PF	50V	CERAMIC	N
	C973	QCS21HJ-101	100PF	50V	CERAMIC	N
	C974	QCS21HJ-101	100PF	50V	CERAMIC	N
	C991	QCS21HJ-331	330PF	50V	CERAMIC	N

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R001	QRC128K-275EM	2.7M	1/2W	COMPOSI	I
⚠	R001	QRC128K-275EM	2.7M	1/2W	COMPOSI	J
	R701	QRD167J-222	2.2K	1/6W	CARBON	
	R702	QRD167J-222	2.2K	1/6W	CARBON	
	R703	QRD167J-104	100K	1/6W	CARBON	
	R704	QRD167J-104	100K	1/6W	CARBON	
	R707	QRD167J-101	100	1/6W	CARBON	
	R708	QRD167J-101	100	1/6W	CARBON	
	R709	QRD167J-152	1.5K	1/6W	CARBON	
	R710	QRD167J-152	1.5K	1/6W	CARBON	
	R711	QRD167J-104	100K	1/6W	CARBON	
	R712	QRD167J-104	100K	1/6W	CARBON	
	R715	QRD167J-152	1.5K	1/6W	CARBON	
	R716	QRD167J-152	1.5K	1/6W	CARBON	
	R749	SDT250			THERMISTER	
	R750	SDT250			THERMISTER	
	R751	QVPE601-501	500	0.15W	VARIABLE	
	R752	QVPE601-501	500	0.15W	VARIABLE	
	R753	QRD167J-561	560	1/6W	CARBON	
	R754	QRD167J-561	560	1/6W	CARBON	
	R755	QRD167J-391	390	1/6W	CARBON	
	R756	QRD167J-391	390	1/6W	CARBON	
⚠	R763	QRD145J-100S	10	1/4W	UNF.CARBON	
⚠	R764	QRD145J-100S	10	1/4W	UNF.CARBON	
⚠	R765	QRD145J-100S	10	1/4W	UNF.CARBON	
⚠	R766	QRD145J-100S	10	1/4W	UNF.CARBON	
	R767	QRD167J-820	82	1/6W	CARBON	
	R768	QRD167J-820	82	1/6W	CARBON	
	R769	QRD167J-820	82	1/6W	CARBON	
	R770	QRD167J-820	82	1/6W	CARBON	
	R771	QRD167J-151	150	1/6W	CARBON	
	R772	QRD167J-151	150	1/6W	CARBON	
	R773	QRD167J-151	150	1/6W	CARBON	
	R774	QRD167J-151	150	1/6W	CARBON	
⚠	R783	QRD145J-272S	2.7K	1/4W	UNF.CARBON	
⚠	R784	QRD145J-272S	2.7K	1/4W	UNF.CARBON	
⚠	R785	QRD145J-271S	270	1/4W	UNF.CARBON	
⚠	R786	QRD145J-271S	270	1/4W	UNF.CARBON	
⚠	R787	ERF032K-R22	0.22	3W	CEMENT	
⚠	R788	ERF032K-R22	0.22	3W	CEMENT	
⚠	R789	QRD145J-100S	10	1/4W	UNF.CARBON	
⚠	R790	QRD145J-100S	10	1/4W	UNF.CARBON	
⚠	R791	QRD145J-100S	10	1/4W	UNF.CARBON	
⚠	R792	QRD145J-100S	10	1/4W	UNF.CARBON	
⚠	R793	QRD125J-330	33	1/2W	UNF.CARBON	
⚠	R794	QRD125J-330	33	1/2W	UNF.CARBON	
⚠	R795	QRG022J-100A	10	2W	O.M.FILM	
⚠	R796	QRG022J-100A	10	2W	O.M.FILM	
⚠	R797	QRD145J-330S	33	1/4W	UNF.CARBON	
⚠	R798	QRD145J-330S	33	1/4W	UNF.CARBON	
⚠	R801	QRG022J-271A	270	2W	O.M.FILM	
⚠	R802	QRG022J-271A	270	2W	O.M.FILM	
⚠	R803	QRG022J-271A	270	2W	O.M.FILM	
⚠	R804	QRD125J-392	3.9K	1/2W	UNF.CARBON	
⚠	R805	QRD145J-272S	2.7K	1/4W	UNF.CARBON	
⚠	R806	QRD145J-470S	47	1/4W	UNF.CARBON	
⚠	R807	QRD145J-220S	22	1/4W	UNF.CARBON	I
⚠	R807	QRD145J-220S	22	1/4W	UNF.CARBON	J
⚠	R807	QRD145J-220S	22	1/4W	UNF.CARBON	K
⚠	R807	QRZ0062-220	22	1/4W	FUSIBLE	L
⚠	R807	QRZ0062-220	22	1/4W	FUSIBLE	MBS
⚠	R807	QRZ0062-220	22	1/4W	FUSIBLE	N
⚠	R808	QRD145J-220S	22	1/4W	UNF.CARBON	I
⚠	R808	QRD145J-220S	22	1/4W	UNF.CARBON	J
⚠	R808	QRD145J-220S	22	1/4W	UNF.CARBON	K
⚠	R808	QRZ0062-220	22	1/4W	FUSIBLE	L
⚠	R808	QRZ0062-220	22	1/4W	FUSIBLE	MBS
⚠	R808	QRZ0062-220	22	1/4W	FUSIBLE	N
⚠	R809	QRG022J-331A	330	2W	O.M.FILM	
⚠	R812	QRG022J-271A	270	2W	O.M.FILM	
⚠	R813	QRG022J-271A	270	2W	O.M.FILM	
⚠	R814	QRG022J-271A	270	2W	O.M.FILM	L
⚠	R814	QRG022J-271A	270	2W	O.M.FILM	MBS
⚠	R814	QRG022J-271A	270	2W	O.M.FILM	N
⚠	R814	QRG022J-331A	330	2W	O.M.FILM	I
⚠	R814	QRG022J-331A	330	2W	O.M.FILM	J
⚠	R814	QRG022J-331A	330	2W	O.M.FILM	K
⚠	R815	QRD125J-332	3.3K	1/2W	UNF.CARBON	
⚠	R816	QRD145J-120S	12	1/4W	UNF.CARBON	I
⚠	R816	QRD145J-120S	12	1/4W	UNF.CARBON	J
⚠	R816	QRD145J-120S	12	1/4W	UNF.CARBON	K
⚠	R816	QRZ0062-180	18	1/4W	FUSIBLE	L
⚠	R816	QRZ0062-180	18	1/4W	FUSIBLE	MBS
⚠	R816	QRZ0062-180	18	1/4W	FUSIBLE	N
⚠	R818	QRD125J-222	2.2K	1/2W	UNF.CARBON	
⚠	R819	QRD125J-222	2.2K	1/2W	UNF.CARBON	
⚠	R822	QRD125J-562	5.6K	1/2W	UNF.CARBON	
	R841	QRD167J-104	100K	1/6W	CARBON	
	R842	QRD167J-104	100K	1/6W	CARBON	
⚠	R843	QRD125J-2R2	2.2	1/2W	UNF.CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R844	QRD125J-2R2	2.2	1/2W	UNF.CARBON	
⚠	R861	QRD145J-100S	10	1/4W	UNF.CARBON	I
⚠	R861	QRD145J-100S	10	1/4W	UNF.CARBON	J
⚠	R861	QRD145J-3R3S	3.3	1/4W	UNF.CARBON	K
⚠	R861	QRZ0062-100	10	1/4W	FUSIBLE	N
⚠	R861	QRZ0062-220	22	1/4W	FUSIBLE	L
⚠	R861	QRZ0062-220	22	1/4W	FUSIBLE	MBS
	R862	QRD167J-472	4.7K	1/6W	CARBON	I
	R862	QRD167J-472	4.7K	1/6W	CARBON	J
	R862	QRD167J-472	4.7K	1/6W	CARBON	L
	R862	QRD167J-472	4.7K	1/6W	CARBON	MBS
	R862	QRD167J-472	4.7K	1/6W	CARBON	N
	R862	QRD167J-622	6.2K	1/6W	CARBON	K
	R863	QRD167J-821	820	1/6W	CARBON	
⚠	R864	QRG012J-272A	2.7K	1W	O.M.FILM	K
	R901	QRD167J-681	680	1/6W	CARBON	
	R902	QRD167J-681	680	1/6W	CARBON	
	R903	QRD167J-562	5.6K	1/6W	CARBON	
	R904	QRD167J-562	5.6K	1/6W	CARBON	
	R905	QRD167J-123	12K	1/6W	CARBON	
	R906	QRD167J-123	12K	1/6W	CARBON	
	R907	QRD167J-152	1.5K	1/6W	CARBON	
	R908	QRD167J-152	1.5K	1/6W	CARBON	
	R909	QRD167J-103	10K	1/6W	CARBON	
	R911	QRD167J-332	3.3K	1/6W	CARBON	
	R912	QRD167J-473	47K	1/6W	CARBON	
	R913	QRD167J-104	100K	1/6W	CARBON	
	R914	QRD167J-823	82K	1/6W	CARBON	
	R915	QRD167J-473	47K	1/6W	CARBON	
	R916	QRD167J-563	56K	1/6W	CARBON	
	R917	QRD167J-683	68K	1/6W	CARBON	
	R918	QRD167J-392	3.9K	1/6W	CARBON	
	R921	QRD167J-224	220K	1/6W	CARBON	
	R922	QRD167J-182	1.8K	1/6W	CARBON	
⚠	R924	QRG022J-821A	820	2W	O.M.FILM	
	R925	QRD167J-161	160	1/6W	CARBON	
	R926	QRD167J-181	180	1/6W	CARBON	
⚠	R931	QRD145J-330S	33	1/4W	UNF.CARBON	
	R935	QRD167J-562	5.6K	1/6W	CARBON	
	R936	QRD167J-562	5.6K	1/6W	CARBON	
	R937	QRD167J-103	10K	1/6W	CARBON	
⚠	R941	QRG022J-471A	470	2W	O.M.FILM	
⚠	R942	QRG022J-471A	470	2W	O.M.FILM	
⚠	R961	QRZ0062-100	10	1/4W	FUSIBLE	N
⚠	R962	QRZ0062-100	10	1/4W	FUSIBLE	N
⚠	R963	QRZ0062-100	10	1/4W	FUSIBLE	N
⚠	R964	QRZ0062-100	10	1/4W	FUSIBLE	N

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMB90TV-801A	SPEAKER TERMINAL	
		EMG7331-001	FUSE CLIP	I
		EMG7331-001	FUSE CLIP	J
		EMG7331-001	FUSE CLIP	L
		EMG7331-001	FUSE CLIP	MBS
		EMG7331-001	FUSE CLIP	N
⚠		ETP1000-41EA	POWER TRANSFORMER	L
⚠		ETP1000-41EA	POWER TRANSFORMER	N
⚠		ETP1000-41EABS	POWER TRANSFORMER	MBS
⚠		ETP1000-41ZA	POWER TRANSFORMER	K
⚠		ETP1000-41JA	POWER TRANSFORMER	I
⚠		ETP1000-41JA	POWER TRANSFORMER	J
		E11859-103	CIRCUIT BOARD	I
		E11859-103	CIRCUIT BOARD	J
		E11859-103	CIRCUIT BOARD	K
		E11859-103	CIRCUIT BOARD	L
		E11859-103	CIRCUIT BOARD	N
		E11859-103BS	CIRCUIT BOARD	MBS
		E305747-001	BRACKET	
		E305748-001	BRACKET	
		E305749-002	HEATE SINK	
		E48269-001	SPACER	L
		E48269-001	SPACER	MBS
		E48269-001	SPACER	N
		E65508-002	TAB	
		E67132-T2R0	FUSE LABEL	L
		E67132-T2R0	FUSE LABEL	MBS
		E67132-T2R0	FUSE LABEL	N
		E67764-102	WRAPPING TERMINAL	
		E67764-103	WRAPPING TERMINAL	
		E67764-202	WRAPPING TERMINAL	I
		E67764-202	WRAPPING TERMINAL	J
		E67764-202	WRAPPING TERMINAL	L
		E67764-202	WRAPPING TERMINAL	MBS
		E67764-202	WRAPPING TERMINAL	N

⚠ : SAFETY PARTS

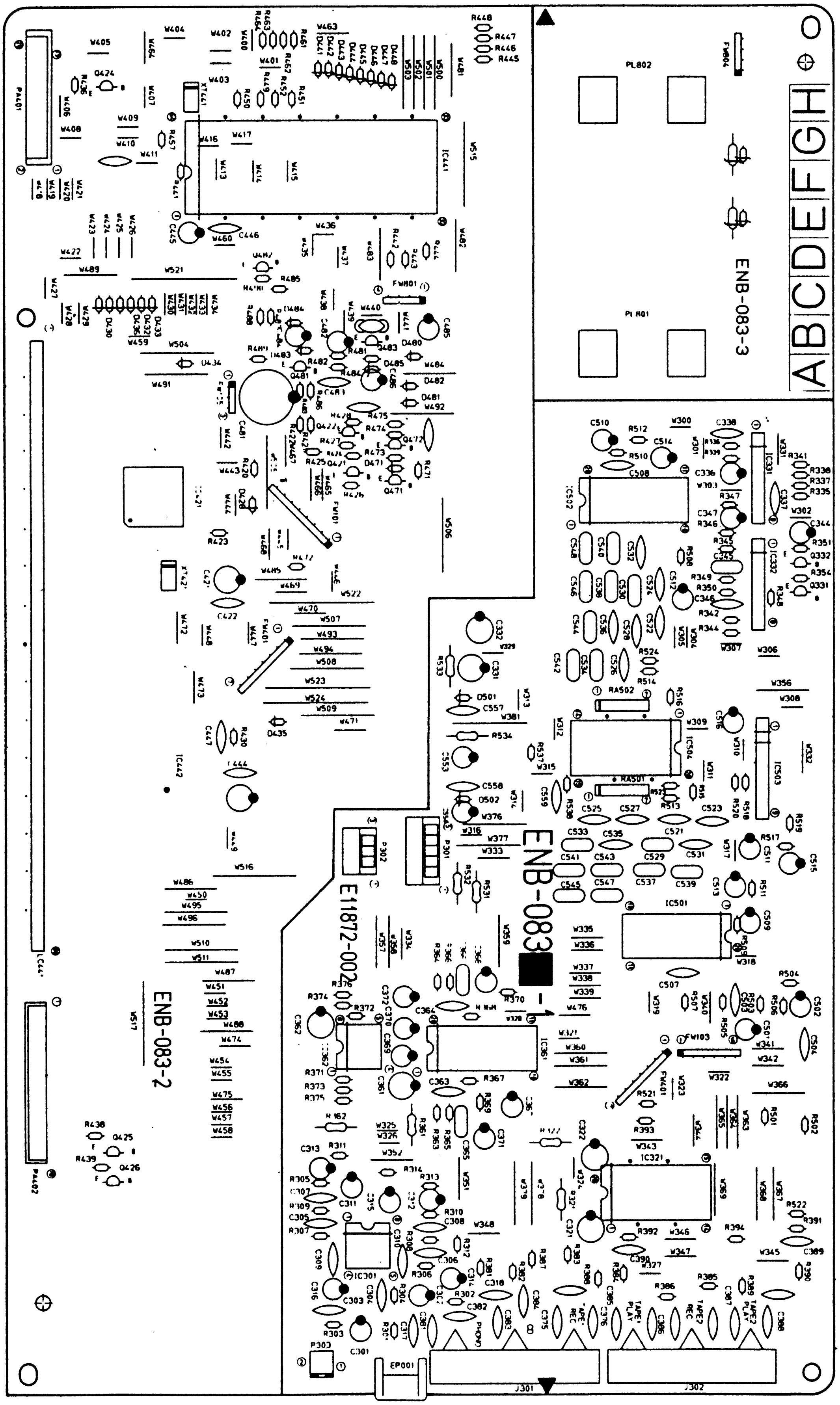
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E67764-203	WRAPPING TERMINAL	K
		E67764-302	WRAPPING TERMINAL	K
		E70225-001	EARTH PLATE	N
		E70859-001	EARTH PLATE	
		E70859-001	EARTH PLATE	
		E70945-H408	HEAT SINK	K
		E73525-003	SCREW	
⚠		QMC0437-002	AC OUTLET	K
⚠		QMC0440-001	AC OUTLET	I
⚠		QMC0440-001	AC OUTLET	J
		SBSB3008CC	SCREW	
		SBSB3012CC	SCREW	K
		SBSG3008Z	SCREW	
	J901	QMS6A40-021	HEADPHONE JACK	
	L751	EQL0001-1R0	INDUCTOR	
	L752	EQL0001-1R0	INDUCTOR	
	P801	EMV7112-004	CONNECTOR	
	P804	EMV7112-004	CONNECTOR	
	P805	EMV7112-003	CONNECTOR	
	P806	EMV7112-003	CONNECTOR	
	FW301	EWR35B-30KST	FLAT WIRE	
	FW302	EWR23C-40JN	FLAT WIRE	
	FW805	EWR33B-20KST	FLAT WIRE	
	FW806	EWR33B-20KST	FLAT WIRE	
	FW901	EWR33B-25SST	FLAT WIRE	
	FW902	EWR34B-25SST	FLAT WIRE	
	FW903	EWR36B-30SST	FLAT WIRE	
	RY001	ESK1D12-115BS	RELAY	MBS
	RY901	ESK5D24-218	RELAY	
	SW901	QST4231-E01	PUSH SWITCH	
	SW902	QST4231-E01	PUSH SWITCH	

⚠ : SAFETY PARTS

■ ENB-083☐ Source Select & SEA Control PC Board Ass'y

Note: ENB-083☐ varies according to the areas employed. See note (1) when placing an order.


ENB-083-3
A
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PL802
PL801
FW804
ENB-083-2
ENB-083
E11872-002
IC441
IC442
IC501
IC502
IC503
IC504
IC321
IC331
IC332
IC361
IC301
PA401
PA402
P301
P302
P303
EP001
J301
J302
RA501
RA502
XT441
XT421
Q424
Q425
Q426
Q471
Q472
Q481
Q331
Q332
FW101
FW103
FW401
FW801
TAPE1 PLAY
TAPE1 REC
TAPE2 PLAY
TAPE2 REC
PHONO

ote (1)

PC Board Ass'y	Designated Areas
ENB-083Ⓐ	the U.S.A., Canada
ENB-083Ⓑ	Other Countries
ENB-083Ⓒ	Australia
ENB-083Ⓓ	Europe (with LW), U.K. (with LW)
ENB-083Ⓔ	West Germany

ransistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q331	DTC144ES	SILICON	ROHM	
	Q332	2SD655(D,E)	SILICON	HITACHI	
	Q421	2SC458(C,D)	SILICON	HITACHI	
	Q422	2SC458(C,D)	SILICON	HITACHI	
	Q424	DTC144ES	SILICON	ROHM	
	Q425	DTC144ES	SILICON	ROHM	
	Q426	DTC144ES	SILICON	ROHM	
	Q471	2SC458(C,D)	SILICON	HITACHI	
	Q472	2SC458(C,D)	SILICON	HITACHI	
	Q481	2SC458(C,D)	SILICON	HITACHI	
	Q482	2SC458(C,D)	SILICON	HITACHI	
	Q483	DTC144ES	SILICON	ROHM	

⚠ : SAFETY PARTS

Cs

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC301	NJM4560DD	I.C.	JRC	
	IC321	TC9164N	I.C.	TOSHIBA	
	IC331	VC4580L	I.C.	JRC	
	IC332	VC4580L	I.C.	JRC	
	IC361	TC9177P	I.C.	TOSHIBA	
	IC362	NJM4560DD	I.C.	JRC	
	IC421	TC9306F-0348S	I.C.	TOSHIBA	
	IC441	MN17581JSU	I.C.	MATSUSHITA	
	IC442	LC7582A	I.C.	SANYO	
	IC501	LA3607S	I.C.	SANYO	
	IC502	LA3607S	I.C.	SANYO	
	IC503	NJM4560SD	I.C.	JRC	
	IC504	LC7522	I.C.	SANYO	

⚠ : SAFETY PARTS

iodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AR
				MAKER	
	D428	1SS133	SILICON	ROHM	
	D430	1SS133	SILICON	ROHM	A
	D432	1SS133	SILICON	ROHM	C
	D432	1SS133	SILICON	ROHM	D
	D432	1SS133	SILICON	ROHM	E
	D433	1SS133	SILICON	ROHM	D
	D434	1SS133	SILICON	ROHM	B
	D435	1SS133	SILICON	ROHM	
	D436	1SS133	SILICON	ROHM	
	D441	1SS133	SILICON	ROHM	
	D442	1SS133	SILICON	ROHM	
	D443	1SS133	SILICON	ROHM	
	D444	1SS133	SILICON	ROHM	
	D445	1SS133	SILICON	ROHM	
	D446	1SS133	SILICON	ROHM	
	D447	1SS133	SILICON	ROHM	
	D448	1SS133	SILICON	ROHM	
	D471	1SS133	SILICON	ROHM	
	D481	1SS133	SILICON	ROHM	
	D482	1SS133	SILICON	ROHM	
	D483	1SS133	SILICON	ROHM	
	D484	1SS133	SILICON	ROHM	
	D485	MTZ5.6JC	ZENER	ROHM	
	D501	MTZ6.8JC	ZENER	ROHM	
	D502	MTZ6.8JC	ZENER	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C301	QETB1HM-475	4.7MF	50V	ELECTRO	
	C302	QETB1HM-475	4.7MF	50V	ELECTRO	
	C303	QCS21HJ-101	100PF	50V	CERAMIC	A
	C303	QCS21HJ-101	100PF	50V	CERAMIC	B
	C303	QCS21HJ-101	100PF	50V	CERAMIC	C
	C303	QCS21HJ-101	100PF	50V	CERAMIC	D
	C303	QCS21HJ-471	470PF	50V	CERAMIC	E
	C304	QCS21HJ-101	100PF	50V	CERAMIC	A
	C304	QCS21HJ-101	100PF	50V	CERAMIC	B
	C304	QCS21HJ-101	100PF	50V	CERAMIC	C
	C304	QCS21HJ-101	100PF	50V	CERAMIC	D
	C304	QCS21HJ-471	470PF	50V	CERAMIC	E
	C305	QCY21HK-182	1800PF	50V	CERAMIC	
	C306	QCY21HK-182	1800PF	50V	CERAMIC	
	C307	QCY21HK-682	6800PF	50V	CERAMIC	
	C308	QCY21HK-682	6800PF	50V	CERAMIC	
	C309	QCY21HK-101	100PF	50V	CERAMIC	
	C310	QCY21HK-101	100PF	50V	CERAMIC	
	C311	QETB1HM-475	4.7MF	50V	ELECTRO	
	C312	QETB1HM-475	4.7MF	50V	ELECTRO	
	C313	QETB1AM-107	100MF	10V	ELECTRO	
	C314	QETB1AM-107	100MF	10V	ELECTRO	
	C315	QETB1CM-476	47MF	16V	ELECTRO	
	C316	QETB1CM-476	47MF	16V	ELECTRO	
	C317	QCF21HP-223	0.022MF	50V	CERAMIC	
	C318	QCF21HP-223	0.022MF	50V	CERAMIC	
	C321	QETB1EM-476	47MF	25V	ELECTRO	
	C322	QETB1EM-476	47MF	25V	ELECTRO	
	C331	QETB1EM-476	47MF	25V	ELECTRO	
	C332	QETB1EM-476	47MF	25V	ELECTRO	
	C336	QETB1CM-226	22MF	16V	ELECTRO	
	C337	QCS21HJ-101	100PF	50V	CERAMIC	
	C338	QCS21HJ-101	100PF	50V	CERAMIC	
	C344	QETB1HM-105	1MF	50V	ELECTRO	
	C345	QFN81HJ-392	3900PF	50V	MYLAR	
	C346	QCS21HJ-100	10PF	50V	CERAMIC	
	C347	QETB1EM-226	22MF	25V	ELECTRO	
	C361	QETB1EM-476	47MF	25V	ELECTRO	
	C362	QETB1EM-476	47MF	25V	ELECTRO	
	C363	QCS21HJ-181	180PF	50V	CERAMIC	
	C364	QCS21HJ-181	180PF	50V	CERAMIC	
	C365	QFN81HK-333	0.033MF	50V	MYLAR	
	C366	QFN81HK-333	0.033MF	50V	MYLAR	
	C367	QETB1HM-475	4.7MF	50V	ELECTRO	
	C368	QETB1HM-475	4.7MF	50V	ELECTRO	
	C369	QETB1HM-105	1MF	50V	ELECTRO	
	C370	QETB1HM-105	1MF	50V	ELECTRO	
	C371	QETB1EM-106	10MF	25V	ELECTRO	
	C372	QETB1EM-106	10MF	25V	ELECTRO	
	C375	QCS21HJ-331	330PF	50V	CERAMIC	E
	C376	QCS21HJ-331	330PF	50V	CERAMIC	E
	C381	QCS21HJ-331	330PF	50V	CERAMIC	E
	C382	QCS21HJ-331	330PF	50V	CERAMIC	E
	C383	QCS21HJ-331	330PF	50V	CERAMIC	E
	C384	QCS21HJ-331	330PF	50V	CERAMIC	E
	C385	QCS21HJ-331	330PF	50V	CERAMIC	E
	C386	QCS21HJ-331	330PF	50V	CERAMIC	E
	C387	QCS21HJ-561	560PF	50V	CERAMIC	E
	C388	QCS21HJ-561	560PF	50V	CERAMIC	E
	C389	QCS21HJ-221	220PF	50V	CERAMIC	E
	C390	QCS21HJ-221	220PF	50V	CERAMIC	E
	C421	QETB1AM-107	100MF	10V	ELECTRO	
	C422	QCF21HP-223	0.022MF	50V	CERAMIC	
	C444	QCF21HP-223	0.022MF	50V	CERAMIC	
	C445	QETB0JM-477	470MF	6.3V	ELECTRO	
	C446	QCF21HP-223	0.022MF	50V	CERAMIC	
	C447	QCS21HJ-681	680PF	50V	CERAMIC	
	C481	EEZ0502-479	47000MF	5.5V	ELECTRO	
	C482	QETB1AM-476	47MF	10V	ELECTRO	
	C483	QCF21HP-223	0.022MF	50V	CERAMIC	
	C484	QETB1HM-225	2.2MF	50V	ELECTRO	
	C485	QETB0JM-227	220MF	6.3V	ELECTRO	
	C486	QETB1EM-106	10MF	25V	ELECTRO	
	C501	QETB1HM-475	4.7MF	50V	ELECTRO	
	C502	QETB1HM-475	4.7MF	50V	ELECTRO	
	C507	QCS21HJ-101	100PF	50V	CERAMIC	
	C508	QCS21HJ-101	100PF	50V	CERAMIC	
	C509	QETB1CM-226	22MF	16V	ELECTRO	
	C510	QETB1CM-226	22MF	16V	ELECTRO	
	C511	QETB1HM-475	4.7MF	50V	ELECTRO	
	C512	QETB1HM-475	4.7MF	50V	ELECTRO	
	C513	QETB1HM-475	4.7MF	50V	ELECTRO	
	C514	QETB1HM-475	4.7MF	50V	ELECTRO	
	C515	QETB1CM-226	22MF	16V	ELECTRO	
	C516	QETB1CM-226	22MF	16V	ELECTRO	
	C521	QCY21HK-272	2700PF	50V	CERAMIC	
	C522	QCY21HK-272	2700PF	50V	CERAMIC	
	C523	QCS21HJ-471	470PF	50V	CERAMIC	
	C524	QCS21HJ-471	470PF	50V	CERAMIC	
	C525	QCY21HK-682	6800PF	50V	CERAMIC	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C526	QCY21HK-682	6800PF	50V	CERAMIC	
	C527	QCY21HK-122	1200PF	50V	CERAMIC	
	C528	QCY21HK-122	1200PF	50V	CERAMIC	
	C529	QFN81HK-183	0.018MF	50V	MYLAR	
	C530	QFN81HK-183	0.018MF	50V	MYLAR	
	C531	QCY21HK-272	2700PF	50V	CERAMIC	
	C532	QCY21HK-272	2700PF	50V	CERAMIC	
	C533	QFN81HK-473	0.047MF	50V	MYLAR	
	C534	QFN81HK-473	0.047MF	50V	MYLAR	
	C535	QCY21HK-682	6800PF	50V	CERAMIC	
	C536	QCY21HK-682	6800PF	50V	CERAMIC	
	C537	QFN81HK-104	0.1MF	50V	MYLAR	
	C538	QFN81HK-104	0.1MF	50V	MYLAR	
	C539	QFN81HK-183	0.018MF	50V	MYLAR	
	C540	QFN81HK-183	0.018MF	50V	MYLAR	
	C541	QFV81HJ-274	0.27MF	50V	T.FILM	
	C542	QFV81HJ-274	0.27MF	50V	T.FILM	
	C543	QFN81HK-473	0.047MF	50V	MYLAR	
	C544	QFN81HK-473	0.047MF	50V	MYLAR	
	C545	QFV81HJ-684	0.68MF	50V	T.FILM	
	C546	QFV81HJ-684	0.68MF	50V	T.FILM	
	C547	QFN81HJ-124	0.12MF	50V	MYLAR	
	C548	QFN81HJ-124	0.12MF	50V	MYLAR	
	C553	QETB1HM-475	4.7MF	50V	ELECTRO	
	C554	QETB1HM-475	4.7MF	50V	ELECTRO	
	C557	QCF21HP-223	0.022MF	50V	CERAMIC	
	C558	QCF21HP-223	0.022MF	50V	CERAMIC	
	C559	QCF21HP-223	0.022MF	50V	CERAMIC	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R301	QRD167J-222	2.2K	1/6W	CARBON	
	R302	QRD167J-222	2.2K	1/6W	CARBON	
	R303	QRD167J-473	47K	1/6W	CARBON	
	R304	QRD167J-473	47K	1/6W	CARBON	
	R305	QRD167J-621	620	1/6W	CARBON	
	R306	QRD167J-621	620	1/6W	CARBON	
	R307	QRD167J-393	39K	1/6W	CARBON	
	R308	QRD167J-393	39K	1/6W	CARBON	
	R309	QRD167J-474	470K	1/6W	CARBON	
	R310	QRD167J-474	470K	1/6W	CARBON	
	R311	QRD167J-104	100K	1/6W	CARBON	
	R312	QRD167J-104	100K	1/6W	CARBON	
	R313	QRD167J-391	390	1/6W	CARBON	
	R314	QRD167J-391	390	1/6W	CARBON	
⚠	R321	QRD145J-680S	68	1/4W	UNF.CARBON	A
⚠	R321	QRD145J-680S	68	1/4W	UNF.CARBON	B
⚠	R321	QRZ0062-680	68	1/4W	FUSIBLE	C
⚠	R321	QRZ0062-680	68	1/4W	FUSIBLE	D
⚠	R321	QRZ0062-680	68	1/4W	FUSIBLE	E
⚠	R322	QRD145J-680S	68	1/4W	UNF.CARBON	A
⚠	R322	QRD145J-680S	68	1/4W	UNF.CARBON	B
⚠	R322	QRZ0062-680	68	1/4W	FUSIBLE	C
⚠	R322	QRZ0062-680	68	1/4W	FUSIBLE	D
⚠	R322	QRZ0062-680	68	1/4W	FUSIBLE	E
	R335	QRD167J-103	10K	1/6W	CARBON	
	R336	QRD167J-103	10K	1/6W	CARBON	
	R337	QRD167J-103	10K	1/6W	CARBON	
	R338	QRD167J-154	150K	1/6W	CARBON	
	R339	QRD167J-103	10K	1/6W	CARBON	
	R341	QRD167J-103	10K	1/6W	CARBON	
	R342	QRD167J-104	100K	1/6W	CARBON	
	R344	QRD167J-104	100K	1/6W	CARBON	
	R345	QRD167J-103	10K	1/6W	CARBON	
	R346	QRD167J-103	10K	1/6W	CARBON	
	R347	QRD167J-103	10K	1/6W	CARBON	
	R348	QRD167J-104	100K	1/6W	CARBON	
	R349	QRD167J-682	6.8K	1/6W	CARBON	
	R350	QRD167J-104	100K	1/6W	CARBON	
	R351	QRD167J-332	3.3K	1/6W	CARBON	
	R354	QRD167J-473	47K	1/6W	CARBON	
⚠	R361	QRD145J-680S	68	1/4W	UNF.CARBON	A
⚠	R361	QRD145J-680S	68	1/4W	UNF.CARBON	B
⚠	R361	QRZ0062-680	68	1/4W	FUSIBLE	C
⚠	R361	QRZ0062-680	68	1/4W	FUSIBLE	D
⚠	R361	QRZ0062-680	68	1/4W	FUSIBLE	E
⚠	R362	QRD145J-680S	68	1/4W	UNF.CARBON	A
⚠	R362	QRD145J-680S	68	1/4W	UNF.CARBON	B
⚠	R362	QRZ0062-680	68	1/4W	FUSIBLE	C
⚠	R362	QRZ0062-680	68	1/4W	FUSIBLE	D
⚠	R362	QRZ0062-680	68	1/4W	FUSIBLE	E
	R363	QRD167J-105	1M	1/6W	CARBON	
	R364	QRD167J-105	1M	1/6W	CARBON	
	R365	QRD167J-563	56K	1/6W	CARBON	
	R366	QRD167J-563	56K	1/6W	CARBON	
	R367	QRD167J-563	56K	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R368	QRD167J-563	56K	1/6W	CARBON	
	R369	QRD167J-104	100K	1/6W	CARBON	
	R370	QRD167J-104	100K	1/6W	CARBON	
	R371	QRD167J-822	8.2K	1/6W	CARBON	
	R372	QRD167J-822	8.2K	1/6W	CARBON	
	R373	QRD167J-103	10K	1/6W	CARBON	
	R374	QRD167J-103	10K	1/6W	CARBON	
	R375	QRD167J-105	1M	1/6W	CARBON	
	R376	QRD167J-105	1M	1/6W	CARBON	
	R381	QRD167J-221	220	1/6W	CARBON	
	R382	QRD167J-221	220	1/6W	CARBON	
	R383	QRD167J-221	220	1/6W	CARBON	
	R384	QRD167J-221	220	1/6W	CARBON	
	R385	QRD167J-221	220	1/6W	CARBON	A
	R385	QRD167J-221	220	1/6W	CARBON	B
	R385	QRD167J-221	220	1/6W	CARBON	C
	R385	QRD167J-221	220	1/6W	CARBON	D
	R385	QRD167J-222	2.2K	1/6W	CARBON	E
	R386	QRD167J-221	220	1/6W	CARBON	A
	R386	QRD167J-221	220	1/6W	CARBON	B
	R386	QRD167J-221	220	1/6W	CARBON	C
	R386	QRD167J-221	220	1/6W	CARBON	D
	R386	QRD167J-222	2.2K	1/6W	CARBON	E
	R387	QRD167J-221	220	1/6W	CARBON	A
	R387	QRD167J-221	220	1/6W	CARBON	B
	R387	QRD167J-221	220	1/6W	CARBON	C
	R387	QRD167J-221	220	1/6W	CARBON	D
	R387	QRD167J-222	2.2K	1/6W	CARBON	E
	R388	QRD167J-221	220	1/6W	CARBON	A
	R388	QRD167J-221	220	1/6W	CARBON	B
	R388	QRD167J-221	220	1/6W	CARBON	C
	R388	QRD167J-221	220	1/6W	CARBON	D
	R388	QRD167J-222	2.2K	1/6W	CARBON	E
	R389	QRD167J-221	220	1/6W	CARBON	
	R390	QRD167J-221	220	1/6W	CARBON	
	R391	QRD167J-105	1M	1/6W	CARBON	
	R392	QRD167J-105	1M	1/6W	CARBON	
	R420	QRD167J-103	10K	1/6W	CARBON	
	R421	QRD167J-103	10K	1/6W	CARBON	
	R422	QRD167J-103	10K	1/6W	CARBON	
	R423	QRD167J-103	10K	1/6W	CARBON	
	R424	QRD167J-471	470	1/6W	CARBON	
	R425	QRD167J-103	10K	1/6W	CARBON	
	R426	QRD167J-103	10K	1/6W	CARBON	
	R427	QRD167J-473	47K	1/6W	CARBON	
	R428	QRD167J-223	22K	1/6W	CARBON	
	R430	QRD167J-563	56K	1/6W	CARBON	
	R436	QRD167J-221	220	1/6W	CARBON	
	R438	QRD167J-820	32	1/6W	CARBON	
	R439	QRD167J-820	32	1/6W	CARBON	
	R441	QRD167J-104	100K	1/6W	CARBON	
	R442	QRD167J-104	100K	1/6W	CARBON	
	R443	QRD167J-104	100K	1/6W	CARBON	
	R444	QRD167J-104	100K	1/6W	CARBON	
	R445	QRD167J-104	100K	1/6W	CARBON	
	R446	QRD167J-104	100K	1/6W	CARBON	
	R447	QRD167J-104	100K	1/6W	CARBON	
	R448	QRD167J-104	100K	1/6W	CARBON	
	R449	QRD167J-104	100K	1/6W	CARBON	
	R450	QRD167J-104	100K	1/6W	CARBON	
	R451	QRD167J-104	100K	1/6W	CARBON	
	R452	QRD167J-104	100K	1/6W	CARBON	
	R461	QRD167J-473	47K	1/6W	CARBON	
	R462	QRD167J-473	47K	1/6W	CARBON	
	R463	QRD167J-473	47K	1/6W	CARBON	
	R464	QRD167J-473	47K	1/6W	CARBON	
	R471	QRD167J-473	47K	1/6W	CARBON	
	R472	QRD167J-471	470	1/6W	CARBON	
	R473	QRD167J-473	47K	1/6W	CARBON	
	R474	QRD167J-223	22K	1/6W	CARBON	
	R475	QRD167J-103	10K	1/6W	CARBON	
	R481	QRD167J-222	2.2K	1/6W	CARBON	
	R482	QRD167J-472	4.7K	1/6W	CARBON	
	R483	QRD167J-102	1K	1/6W	CARBON	
	R484	QRD167J-332	3.3K	1/6W	CARBON	
	R485	QRD167J-473	47K	1/6W	CARBON	
	R486	QRD167J-473	47K	1/6W	CARBON	
	R487	QRD167J-223	22K	1/6W	CARBON	
	R488	QRD167J-473	47K	1/6W	CARBON	
	R489	QRD167J-331	330	1/6W	CARBON	
	R490	QRD167J-473	47K	1/6W	CARBON	
	R501	QRD167J-203	20K	1/6W	CARBON	
	R502	QRD167J-203	20K	1/6W	CARBON	
	R503	QRD167J-224	220K	1/6W	CARBON	
	R504	QRD167J-224	220K	1/6W	CARBON	
	R505	QRD167J-274	270K	1/6W	CARBON	
	R506	QRD167J-274	270K	1/6W	CARBON	
	R507	QRD167J-102	1K	1/6W	CARBON	
	R508	QRD167J-102	1K	1/6W	CARBON	
	R509	QRD167J-103	10K	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R510	QRD167J-103	10K	1/6W	CARBON	
	R511	QRD167J-103	10K	1/6W	CARBON	
	R512	QRD167J-103	10K	1/6W	CARBON	
	R513	QRD167J-224	220K	1/6W	CARBON	
	R514	QRD167J-224	220K	1/6W	CARBON	
	R515	QRD167J-154	150K	1/6W	CARBON	
	R516	QRD167J-154	150K	1/6W	CARBON	
	R517	QRD167J-682	6.8K	1/6W	CARBON	
	R518	QRD167J-682	6.8K	1/6W	CARBON	
	R519	QRD167J-103	10K	1/6W	CARBON	
	R520	QRD167J-103	10K	1/6W	CARBON	
	R521	QRD167J-104	100K	1/6W	CARBON	
	R522	QRD167J-104	100K	1/6W	CARBON	
	R523	QRD167J-474	470K	1/6W	CARBON	
	R524	QRD167J-474	470K	1/6W	CARBON	
⚠	R531	QRD145J-680S	68	1/4W	UNF.CARBON	A
⚠	R531	QRD145J-680S	68	1/4W	UNF.CARBON	B
⚠	R531	QRZ0062-680	68	1/4W	FUSIBLE	C
⚠	R531	QRZ0062-680	68	1/4W	FUSIBLE	D
⚠	R531	QRZ0062-680	68	1/4W	FUSIBLE	E
⚠	R532	QRD145J-680S	68	1/4W	UNF.CARBON	A
⚠	R532	QRD145J-680S	68	1/4W	UNF.CARBON	B
⚠	R532	QRZ0062-680	68	1/4W	FUSIBLE	C
⚠	R532	QRZ0062-680	68	1/4W	FUSIBLE	D
⚠	R532	QRZ0062-680	68	1/4W	FUSIBLE	E
⚠	R533	QRD145J-221S	220	1/4W	UNF.CARBON	
⚠	R534	QRD145J-271S	270	1/4W	UNF.CARBON	
	R537	QRD167J-681	680	1/6W	CARBON	
	R538	QRD167J-272	2.7K	1/6W	CARBON	
	RA501	QRB069J-474	470K	1/10W	R.NETWORK	
	RA502	QRB069J-474	470K	1/10W	R.NETWORK	

⚠ : SAFETY PARTS

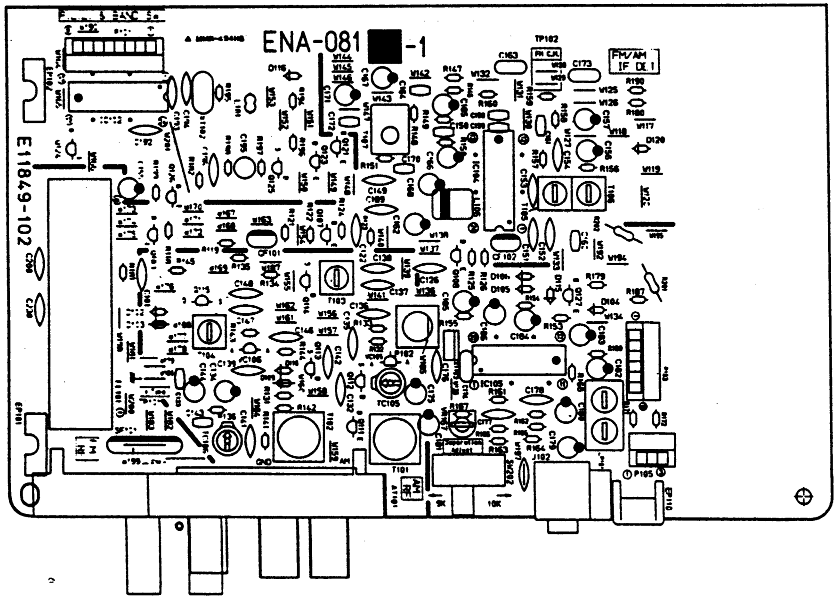
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11872-002	CIRCUIT BOARD	
		E45524-002	FUSE CLIP	
	J301	EMN00TV-602A	6P PIN JACK	
	J302	EMN00TV-602A	6P PIN JACK	
	P301	EMV7112-005	CONNECTOR	
	P302	EMV7112-003	CONNECTOR	
	P303	QMV5005-002K	PLUG ASSY	
	EP001	E70225-001	EARTH PLATE	
	FW101	EWR38B-25KST	FLAT WIRE	
	FW103	EWR36B-25KST	FLAT WIRE	
	FW105	EWR33B-35KST	FLAT WIRE	B
	FW401	EWR37B-25SST	FLAT WIRE	
	FW801	EWR34B-25KST	FLAT WIRE	
	FW804	EWR34B-25KST	FLAT WIRE	
	LC441	ELU0002-052	LCD PANEL	
	PA401	EMV5128-020	PLUG ASSY	
	PA402	EMV7121-018	CONNECTOR	
	XT421	ECX0072-000EM	RESONATOR	
	XT441	ECX0072-000EM	RESONATOR	

⚠ : SAFETY PARTS

■ ENA-081☐ Tuner PC Board Ass'y

Note: ENA-081☐ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
ENA-081🄰	the U.S.A., Canada
ENA-081🄱	Other Countries
ENA-081🄲	Australia
ENA-081🄳	Europe (with LW)
ENA-081🄴	West Germany
ENA-081🄵	U.K. (with LW)

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q103	2SC461(B,C)	SILICON	HITACHI	
	Q107	2SC535(B,C)	SILICON	HITACHI	
	Q108	2SC461(B,C)	SILICON	HITACHI	
	Q111	2SD1302(S,T)	SILICON	MATSUSHITA	D
	Q111	2SD1302(S,T)	SILICON	MATSUSHITA	F
	Q111	2SD1302(S,T)	SILICON	MATSUSHITA	G
	Q112	2SK301(Q,R)	F.E.T	MATSUSHITA	
	Q113	2SK301(Q,R)	F.E.T	MATSUSHITA	D
	Q113	2SK301(Q,R)	F.E.T	MATSUSHITA	F
	Q113	2SK301(Q,R)	F.E.T	MATSUSHITA	G
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	D
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	F
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	G
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	D
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	F
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	G
	Q121	AN1A4P	SILICON	NEC	D
	Q121	AN1A4P	SILICON	NEC	F
	Q121	AN1A4P	SILICON	NEC	G
	Q123	AN1A4P	SILICON	NEC	
	Q124	AN1A4P	SILICON	NEC	
	Q125	2SK301(Q2)	F.E.T	MATSUSHITA	
	Q126	2SC458(D)	SILICON	HITACHI	
	Q127	AA1L4M	SI.TRANSIS	NEC	

⚠ : SAFETY PARTS

ICs

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC102	LC7218	I.C.	SANYO	
	IC104	LA1266A	I.C.	SANYO	
	IC105	LA3401	I.C.	SANYO	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D102	1SS119	SILICON	HITACHI	D
	D102	1SS119	SILICON	HITACHI	F
	D102	1SS119	SILICON	HITACHI	G
	D103	1SS119	SILICON	HITACHI	D
	D103	1SS119	SILICON	HITACHI	F
	D103	1SS119	SILICON	HITACHI	G
	D104	1SS119	SILICON	HITACHI	
	D105	1SS119	SILICON	HITACHI	
	D106	1SS119	SILICON	HITACHI	
	D109	1SS119	SILICON	HITACHI	D
	D109	1SS119	SILICON	HITACHI	F
	D109	1SS119	SILICON	HITACHI	G
	D110	1SS119	SILICON	HITACHI	D
	D110	1SS119	SILICON	HITACHI	F
	D110	1SS119	SILICON	HITACHI	G
	D115	1SS119	SILICON	HITACHI	
	D116	1SS119	SILICON	HITACHI	
	D120	1SS119	SILICON	HITACHI	
	VC105	SVC342(L)	VARICAP	SANYO	
	VC106	SVC342(L)	VARICAP	SANYO	D
	VC106	SVC342(L)	VARICAP	SANYO	F
	VC106	SVC342(L)	VARICAP	SANYO	G

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C101	QCF21HP-223	0.022MF	50V	CERAMIC	
	C122	QCF21HP-223	0.022MF	50V	CERAMIC	
	C126	QCF21HP-223	0.022MF	50V	CERAMIC	
	C132	QCS21HJ-561	560PF	50V	CERAMIC	
	C133	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C134	QETB1EM-106	10MF	25V	ELECTRO	
	C135	QCC21EM-223	0.022MF	25V	CERAMIC	
	C136	QCT26CH-180	18PF	50V	CERAMIC	
	C137	QCT26CH-221	220PF	50V	CERAMIC	
	C138	QCT26CH-241	240PF	50V	CERAMIC	
	C139	QCC21EM-223	0.022MF	25V	CERAMIC	D
	C139	QCC21EM-223	0.022MF	25V	CERAMIC	F
	C139	QCC21EM-223	0.022MF	25V	CERAMIC	G
	C141	QCS21HJ-270	27PF	50V	CERAMIC	D
	C141	QCS21HJ-270	27PF	50V	CERAMIC	F
	C141	QCS21HJ-270	27PF	50V	CERAMIC	G
	C142	QCY21HK-272	2700PF	50V	CERAMIC	D
	C142	QCY21HK-272	2700PF	50V	CERAMIC	F
	C142	QCY21HK-272	2700PF	50V	CERAMIC	G
	C143	QCHB1EZ-223	0.022MF	25V	CERAMIC	D
	C143	QCHB1EZ-223	0.022MF	25V	CERAMIC	F
	C143	QCHB1EZ-223	0.022MF	25V	CERAMIC	G
	C144	QETB1EM-106	10MF	25V	ELECTRO	D
	C144	QETB1EM-106	10MF	25V	ELECTRO	F
	C144	QETB1EM-106	10MF	25V	ELECTRO	G
	C146	QCT26CH-680	68PF	50V	CERAMIC	D
	C146	QCT26CH-680	68PF	50V	CERAMIC	F
	C146	QCT26CH-680	68PF	50V	CERAMIC	G
	C147	QCT26CH-220	22PF	50V	CERAMIC	D
	C147	QCT26CH-220	22PF	50V	CERAMIC	F
	C147	QCT26CH-220	22PF	50V	CERAMIC	G
	C148	QCT26CH-121	120PF	50V	CERAMIC	D
	C148	QCT26CH-121	120PF	50V	CERAMIC	F
	C148	QCT26CH-121	120PF	50V	CERAMIC	G
	C149	QCF21HP-223	0.022MF	50V	CERAMIC	
	C150	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C151	QCF21HP-223	0.022MF	50V	CERAMIC	
	C152	QCF21HP-223	0.022MF	50V	CERAMIC	
	C153	QCC21EM-223	0.022MF	25V	CERAMIC	
	C154	QCF21HP-223	0.022MF	50V	CERAMIC	
	C155	QETB1EM-226	22MF	25V	ELECTRO	
	C156	QETB1HM-475	4.7MF	50V	ELECTRO	
	C157	QETB1HM-474	0.47MF	50V	ELECTRO	
	C158	QCBB1HK-101	100PF	50V	CERAMIC	
	C159	QCBB1HK-101	100PF	50V	CERAMIC	
	C160	QCBB1HK-101	100PF	50V	CERAMIC	D
	C160	QCBB1HK-101	100PF	50V	CERAMIC	F
	C160	QCBB1HK-221	220PF	50V	CERAMIC	A
	C160	QCBB1HK-221	220PF	50V	CERAMIC	B
	C160	QCBB1HK-221	220PF	50V	CERAMIC	C
	C160	QCBB1HK-221	220PF	50V	CERAMIC	E
	C160	QCBB1HK-221	220PF	50V	CERAMIC	G
	C161	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C162	QETB1EM-106	10MF	25V	ELECTRO	
	C163	QFN81HJ-332	3300PF	50V	MYLAR	
	C164	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C165	QETB1HM-474	0.47MF	50V	ELECTRO	
	C166	QETB1HM-225	2.2MF	50V	ELECTRO	
	C167	QETB1HM-225	2.2MF	50V	ELECTRO	
	C168	QETB1HM-475	4.7MF	50V	ELECTRO	
	C169	QCF21HP-223	0.022MF	50V	CERAMIC	
	C170	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C171	QETB1EM-106	10MF	25V	ELECTRO	
	C172	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C173	QFN81HK-223	0.022MF	50V	MYLAR	
	C174	QFN81HK-473	0.047MF	50V	MYLAR	
	C175	QETB1EM-106	10MF	25V	ELECTRO	
	C176	QCY21HK-102	1000PF	50V	CERAMIC	
	C177	QCS21HJ-271	270PF	50V	CERAMIC	C
	C177	QCS21HJ-271	270PF	50V	CERAMIC	D
	C177	QCS21HJ-271	270PF	50V	CERAMIC	E
	C177	QCS21HJ-271	270PF	50V	CERAMIC	F
	C177	QCS21HJ-271	270PF	50V	CERAMIC	G
	C177	QCS21HJ-561	560PF	50V	CERAMIC	A
	C177	QCS21HJ-561	560PF	50V	CERAMIC	B
	C178	QCS21HJ-271	270PF	50V	CERAMIC	C
	C178	QCS21HJ-271	270PF	50V	CERAMIC	D
	C178	QCS21HJ-271	270PF	50V	CERAMIC	E
	C178	QCS21HJ-271	270PF	50V	CERAMIC	F
	C178	QCS21HJ-271	270PF	50V	CERAMIC	G
	C178	QCS21HJ-561	560PF	50V	CERAMIC	A
	C178	QCS21HJ-561	560PF	50V	CERAMIC	B
	C179	QETB1HM-225	2.2MF	50V	ELECTRO	
	C180	QETB1HM-225	2.2MF	50V	ELECTRO	
	C181	QETB1EM-106	10MF	25V	ELECTRO	
	C182	QETB1HM-225	2.2MF	50V	ELECTRO	
	C183	QETB1HM-105	1MF	50V	ELECTRO	
	C184	QETB1HM-105	1MF	50V	ELECTRO	
	C185	QETB1HM-225	2.2MF	50V	ELECTRO	
	C186	QETB1HM-474	0.47MF	50V	ELECTRO	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C192	QCC21EM-473	0.047MF	25V	CERAMIC	
	C193	QCS21HJ-180	18PF	50V	CERAMIC	
	C194	QCS21HJ-180	18PF	50V	CERAMIC	
	C195	QEN51HM-474	0.47MF	50V	NON POLE	
	C196	QCY21HK-102	1000PF	50V	CERAMIC	
	C230	QCF21HP-103	0.01MF	50V	CERAMIC	
	TC105	ENZ1003-006	15.5PF	50V	TRIMMER	
	TC106	ENZ1003-006	15.5PF	50V	TRIMMER	D
	TC106	ENZ1003-006	15.5PF	50V	TRIMMER	F
	TC106	ENZ1003-006	15.5PF	50V	TRIMMER	G

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R118	QRD167J-332	3.3K	1/6W	CARBON	
	R119	QRD167J-221	220	1/6W	CARBON	
	R121	QRD167J-391	390	1/6W	CARBON	
	R122	QRD167J-272	2.7K	1/6W	CARBON	
	R123	QRD167J-102	1K	1/6W	CARBON	
	R124	QRD167J-681	680	1/6W	CARBON	
	R125	QRD167J-332	3.3K	1/6W	CARBON	
	R126	QRD167J-221	220	1/6W	CARBON	
	R131	QRD167J-331	330	1/6W	CARBON	
	R132	QRD167J-103	10K	1/6W	CARBON	
	R133	QRD167J-473	47K	1/6W	CARBON	
	R134	QRD167J-103	10K	1/6W	CARBON	D
	R134	QRD167J-103	10K	1/6W	CARBON	F
	R134	QRD167J-103	10K	1/6W	CARBON	G
	R135	QRD167J-470	47	1/6W	CARBON	
	R136	QRD167J-103	10K	1/6W	CARBON	
	R141	QRD167J-472	4.7K	1/6W	CARBON	D
	R141	QRD167J-472	4.7K	1/6W	CARBON	F
	R141	QRD167J-472	4.7K	1/6W	CARBON	G
	R142	QRD167J-331	330	1/6W	CARBON	D
	R142	QRD167J-331	330	1/6W	CARBON	F
	R142	QRD167J-331	330	1/6W	CARBON	G
	R143	QRD167J-103	10K	1/6W	CARBON	D
	R143	QRD167J-103	10K	1/6W	CARBON	F
	R143	QRD167J-103	10K	1/6W	CARBON	G
	R144	QRD167J-473	47K	1/6W	CARBON	D
	R144	QRD167J-473	47K	1/6W	CARBON	F
	R144	QRD167J-473	47K	1/6W	CARBON	G
	R145	QRD167J-103	10K	1/6W	CARBON	D
	R145	QRD167J-103	10K	1/6W	CARBON	F
	R145	QRD167J-103	10K	1/6W	CARBON	G
	R146	QRD167J-560	56	1/6W	CARBON	
	R147	QRD167J-103	10K	1/6W	CARBON	
	R148	QRD167J-103	10K	1/6W	CARBON	
	R149	QRD167J-223	22K	1/6W	CARBON	
	R150	QRD167J-103	10K	1/6W	CARBON	
	R151	QRD167J-224	220K	1/6W	CARBON	
	R153	QRD167J-103	10K	1/6W	CARBON	
	R154	QRD167J-103	10K	1/6W	CARBON	
	R155	QRD167J-562	5.6K	1/6W	CARBON	
	R156	QRD167J-822	8.2K	1/6W	CARBON	
	R157	QRD167J-103	10K	1/6W	CARBON	
	R158	QRD167J-183	18K	1/6W	CARBON	A
	R158	QRD167J-333	33K	1/6W	CARBON	B
	R158	QRD167J-333	33K	1/6W	CARBON	C
	R158	QRD167J-333	33K	1/6W	CARBON	D
	R158	QRD167J-333	33K	1/6W	CARBON	E
	R158	QRD167J-333	33K	1/6W	CARBON	F
	R158	QRD167J-333	33K	1/6W	CARBON	G
	R159	QRD167J-561	560	1/6W	CARBON	
	R160	QRD167J-123	12K	1/6W	CARBON	A
	R160	QRD167J-123	12K	1/6W	CARBON	B
	R160	QRD167J-273	27K	1/6W	CARBON	C
	R160	QRD167J-273	27K	1/6W	CARBON	D
	R160	QRD167J-273	27K	1/6W	CARBON	E
	R160	QRD167J-273	27K	1/6W	CARBON	F
	R160	QRD167J-273	27K	1/6W	CARBON	G
	R161	QRD167J-124	120K	1/6W	CARBON	A
	R161	QRD167J-124	120K	1/6W	CARBON	B
	R161	QRD167J-184	180K	1/6W	CARBON	C
	R161	QRD167J-184	180K	1/6W	CARBON	D
	R161	QRD167J-184	180K	1/6W	CARBON	E
	R161	QRD167J-184	180K	1/6W	CARBON	F

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R161	QRD167J-184	180K	1/6W	CARBON	G
	R161	QRD167J-184	180K	1/6W	CARBON	I
	R162	QRD167J-124	120K	1/6W	CARBON	A
	R162	QRD167J-124	120K	1/6W	CARBON	B
	R162	QRD167J-184	180K	1/6W	CARBON	C
	R162	QRD167J-184	180K	1/6W	CARBON	D
	R162	QRD167J-184	180K	1/6W	CARBON	E
	R162	QRD167J-184	180K	1/6W	CARBON	F
	R162	QRD167J-184	180K	1/6W	CARBON	G
	R163	QRD167J-332	3.3K	1/6W	CARBON	
	R164	QRD167J-332	3.3K	1/6W	CARBON	
	R165	QRD167J-184	180K	1/6W	CARBON	A
	R165	QRD167J-184	180K	1/6W	CARBON	B
	R165	QRD167J-274	270K	1/6W	CARBON	C
	R165	QRD167J-274	270K	1/6W	CARBON	D
	R165	QRD167J-274	270K	1/6W	CARBON	E
	R165	QRD167J-274	270K	1/6W	CARBON	F
	R165	QRD167J-274	270K	1/6W	CARBON	G
	R166	QRD167J-184	180K	1/6W	CARBON	A
	R166	QRD167J-184	180K	1/6W	CARBON	B
	R166	QRD167J-274	270K	1/6W	CARBON	C
	R166	QRD167J-274	270K	1/6W	CARBON	D
	R166	QRD167J-274	270K	1/6W	CARBON	E
	R166	QRD167J-274	270K	1/6W	CARBON	F.
	R166	QRD167J-274	270K	1/6W	CARBON	G
	R167	QRD167J-393	39K	1/6W	CARBON	A
	R167	QRD167J-393	39K	1/6W	CARBON	B
	R168	QRD167J-103	10K	1/6W	CARBON	
	R169	QRD167J-103	10K	1/6W	CARBON	
	R171	QRD167J-682	6.8K	1/6W	CARBON	
	R172	QRD167J-682	6.8K	1/6W	CARBON	
	R179	QRD167J-562	5.6K	1/6W	CARBON	
	R180	QRD167J-472	4.7K	1/6W	CARBON	
	R181	QRD167J-222	2.2K	1/6W	CARBON	
	R182	QRD167J-181	180	1/6W	CARBON	
	R187	QRD167J-101	100	1/6W	CARBON	
	R190	QRD167J-472	4.7K	1/6W	CARBON	
	R194	QRD167J-472	4.7K	1/6W	CARBON	
	R195	QRD167J-473	47K	1/6W	CARBON	
	R196	QRD167J-103	10K	1/6W	CARBON	A
	R196	QRD167J-103	10K	1/6W	CARBON	B
	R196	QRD167J-103	10K	1/6W	CARBON	C
	R196	QRD167J-222	2.2K	1/6W	CARBON	D
	R196	QRD167J-222	2.2K	1/6W	CARBON	E
	R196	QRD167J-222	2.2K	1/6W	CARBON	F
	R196	QRD167J-222	2.2K	1/6W	CARBON	G
	R197	QRD167J-222	2.2K	1/6W	CARBON	
	R198	QRD167J-332	3.3K	1/6W	CARBON	A
	R198	QRD167J-332	3.3K	1/6W	CARBON	B
	R198	QRD167J-332	3.3K	1/6W	CARBON	C
	R198	QRD167J-822	8.2K	1/6W	CARBON	D
	R198	QRD167J-822	8.2K	1/6W	CARBON	E
	R198	QRD167J-822	8.2K	1/6W	CARBON	F
	R198	QRD167J-822	8.2K	1/6W	CARBON	G
	R199	QRD167J-472	4.7K	1/6W	CARBON	
⚠	R201	QRD145J-680S	68	1/4W	UNF.CARBON	A
⚠	R201	QRD145J-680S	68	1/4W	UNF.CARBON	B
⚠	R201	QRZ0062-680	68	1/4W	FUSIBLE	C
⚠	R201	QRZ0062-680	68	1/4W	FUSIBLE	D
⚠	R201	QRZ0062-680	68	1/4W	FUSIBLE	E
⚠	R201	QRZ0062-680	68	1/4W	FUSIBLE	F
⚠	R201	QRZ0062-680	68	1/4W	FUSIBLE	G
⚠	R202	QRD145J-680S	68	1/4W	UNF.CARBON	A
⚠	R202	QRD145J-680S	68	1/4W	UNF.CARBON	B
⚠	R202	QRZ0062-470	47	1/4W	FUSIBLE	E
⚠	R202	QRZ0062-470	47	1/4W	FUSIBLE	G
⚠	R202	QRZ0062-680	68	1/4W	FUSIBLE	C
⚠	R202	QRZ0062-680	68	1/4W	FUSIBLE	D
⚠	R202	QRZ0062-680	68	1/4W	FUSIBLE	F
	VR167	QVPE601-104	100K	0.15W	VARIABLE	
	VR167	QVPE601-104	100K	0.15W	VARIABLE	C
	VR167	QVPE601-104	100K	0.15W	VARIABLE	D
	VR167	QVPE601-104	100K	0.15W	VARIABLE	E
	VR167	QVPE601-104	100K	0.15W	VARIABLE	F
	VR167	QVPE601-104	100K	0.15W	VARIABLE	G

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11849-102(S)	CIRCUIT BOARD	
	J102	QMS3501-021	MINI JACK	
	L101	EQL4004-1R0	INDUCTOR	
	L106	EQL3001-102K	INDUCTOR	
	P101	EMV7112-008	CONNECTOR	
	P103	EMV7112-006	CONNECTOR	
	P105	EMV7112-003	CONNECTOR	B
	T101	EQR1111-014	AM RF COIL	
	T102	EQR1111-005	AM RF COIL	D
	T102	EQR1111-005	AM RF COIL	F
	T102	EQR1111-005	AM RF COIL	G
	T103	EQR1207-015	MW OSC COIL	
	T104	EQR1307-009	LW OSC COIL	D
	T104	EQR1307-009	LW OSC COIL	F
	T104	EQR1307-009	LW OSC COIL	G
	T105	EQT2140-012	I.F. TRANSFORMER	
	T106	EQT2140-013	I.F. TRANSFORMER	
	T107	ECB1560-006	CERAMIC FILTER	
	AT101	EMB41YV-301K	ANTENNA TERMINAL	D
	AT101	EMB41YV-301K	ANTENNA TERMINAL	E
	AT101	EMB41YV-301K	ANTENNA TERMINAL	G
	AT101	EMB41YV-401K	ANTENNA TERMINAL	A
	AT101	EMB41YV-401K	ANTENNA TERMINAL	B
	AT101	EMB41YV-401K	ANTENNA TERMINAL	C
	AT101	EMB41YV-401K	ANTENNA TERMINAL	F
	CF101	ECB2118-001R	CERAMIC FILTER	D
	CF101	ECB2118-001R	CERAMIC FILTER	E
	CF101	ECB2118-001R	CERAMIC FILTER	F
	CF101	ECB2118-001R	CERAMIC FILTER	G
	CF101	ECB2123-001R	CERAMIC FILTER	A
	CF101	ECB2123-001R	CERAMIC FILTER	B
	CF101	ECB2123-001R	CERAMIC FILTER	C
	CF102	ECB2118-001R	CERAMIC FILTER	D

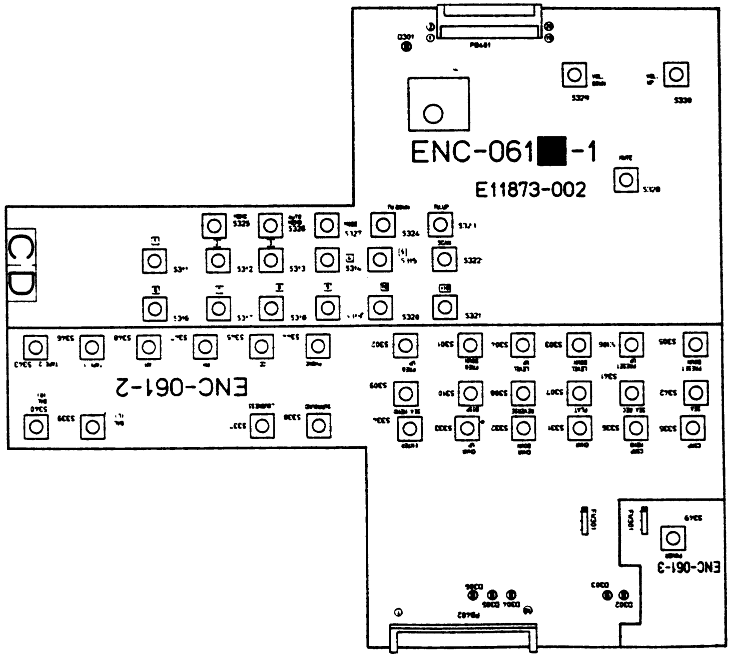
⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	CF102	ECB2118-001R	CERAMIC FILTER	E
	CF102	ECB2118-001R	CERAMIC FILTER	F
	CF102	ECB2118-001R	CERAMIC FILTER	G
	CF102	ECB2123-001R	CERAMIC FILTER	A
	CF102	ECB2123-001R	CERAMIC FILTER	B
	CF102	ECB2123-001R	CERAMIC FILTER	C
	EP101	E70859-001	EARTH PLATE	
	EP102	E70859-001	EARTH PLATE	
	EP110	E70225-002	EARTH PLATE	
	FE101	EAF2203-001	FRONT END	
	FE101	EAF2203-001	FRONT END	A
	FE101	EAF2203-001	FRONT END	B
	FE101	EAF2203-001	FRONT END	C
	FE101	EAF2203-001	FRONT END	D
	FE101	EAF2203-001	FRONT END	F
	FE101	EAF2203-002	FRONT END	E
	FE101	EAF2203-002	FRONT END	G
	LP101	EQF0101-002	LOW PASS FILTER	
	LP102	EQF0102-001	LOW PASS FILTER	E
	LP102	EQF0102-001	LOW PASS FILTER	G
	BF101	EQF0201-006	BAND PASS FILTER	E
	BF101	EQF0201-006	BAND PASS FILTER	G
	SW202	QSS1201-032	SLIDE SWITCH	B
	XT102	ECX0007-200KC	RESONATOR	
	XT103	ECX0000-456KR	RESONATOR	

⚠ : SAFETY PARTS

■ ENC-061🅱 Front Switch PC Board Ass'y



Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D301	SLH-34VC3F	L.E.D.	ROHM	
	D302	SLR-34DC3F	L.E.D.	ROHM	
	D303	SLR-34DC3F	L.E.D.	ROHM	
	D304	SLR-34DC3F	L.E.D.	ROHM	
	D305	SLR-34DC3F	L.E.D.	ROHM	
	D306	SLR-34DC3F	L.E.D.	ROHM	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11873-002(S)	CIRCUIT BOARD	
		A1QH3021H0	SENSOR	
	S301	ESP0001-007	TACT SWITCH	
	S302	ESP0001-007	TACT SWITCH	
	S303	ESP0001-007	TACT SWITCH	
	S304	ESP0001-007	TACT SWITCH	
	S305	ESP0001-007	TACT SWITCH	
	S306	ESP0001-007	TACT SWITCH	
	S307	ESP0001-007	TACT SWITCH	
	S308	ESP0001-007	TACT SWITCH	
	S309	ESP0001-007	TACT SWITCH	
	S310	ESP0001-007	TACT SWITCH	
	S311	ESP0001-007	TACT SWITCH	
	S312	ESP0001-007	TACT SWITCH	
	S313	ESP0001-007	TACT SWITCH	
	S314	ESP0001-007	TACT SWITCH	
	S315	ESP0001-007	TACT SWITCH	
	S316	ESP0001-007	TACT SWITCH	
	S317	ESP0001-007	TACT SWITCH	
	S318	ESP0001-007	TACT SWITCH	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	S319	ESP0001-007	TACT SWITCH	
	S320	ESP0001-007	TACT SWITCH	
	S321	ESP0001-007	TACT SWITCH	
	S322	ESP0001-007	TACT SWITCH	
	S323	ESP0001-007	TACT SWITCH	
	S324	ESP0001-007	TACT SWITCH	
	S325	ESP0001-007	TACT SWITCH	
	S326	ESP0001-007	TACT SWITCH	
	S327	ESP0001-007	TACT SWITCH	
	S328	ESP0001-007	TACT SWITCH	
	S329	ESP0001-007	TACT SWITCH	
	S330	ESP0001-007	TACT SWITCH	
	S331	ESP0001-007	TACT SWITCH	
	S332	ESP0001-007	TACT SWITCH	
	S333	ESP0001-007	TACT SWITCH	
	S334	ESP0001-007	TACT SWITCH	
	S335	ESP0001-007	TACT SWITCH	
	S336	ESP0001-007	TACT SWITCH	
	S337	ESP0001-007	TACT SWITCH	
	S338	ESP0001-007	TACT SWITCH	
	S339	ESP0001-007	TACT SWITCH	
	S340	ESP0001-007	TACT SWITCH	
	S341	ESP0001-007	TACT SWITCH	
	S342	ESP0001-007	TACT SWITCH	
	S343	ESP0001-007	TACT SWITCH	
	S344	ESP0001-007	TACT SWITCH	
	S345	ESP0001-007	TACT SWITCH	
	S346	ESP0001-007	TACT SWITCH	
	S347	ESP0001-007	TACT SWITCH	
	S348	ESP0001-007	TACT SWITCH	
	S349	ESP0001-007	TACT SWITCH	
	FW301	EWR33B-10SST	FLAT WIRE	
	PB401	EMV7128-020	CONNECTOR	
	PB402	EMV5121-018	PLUG ASSY	

⚠ : SAFETY PARTS

Accessories List

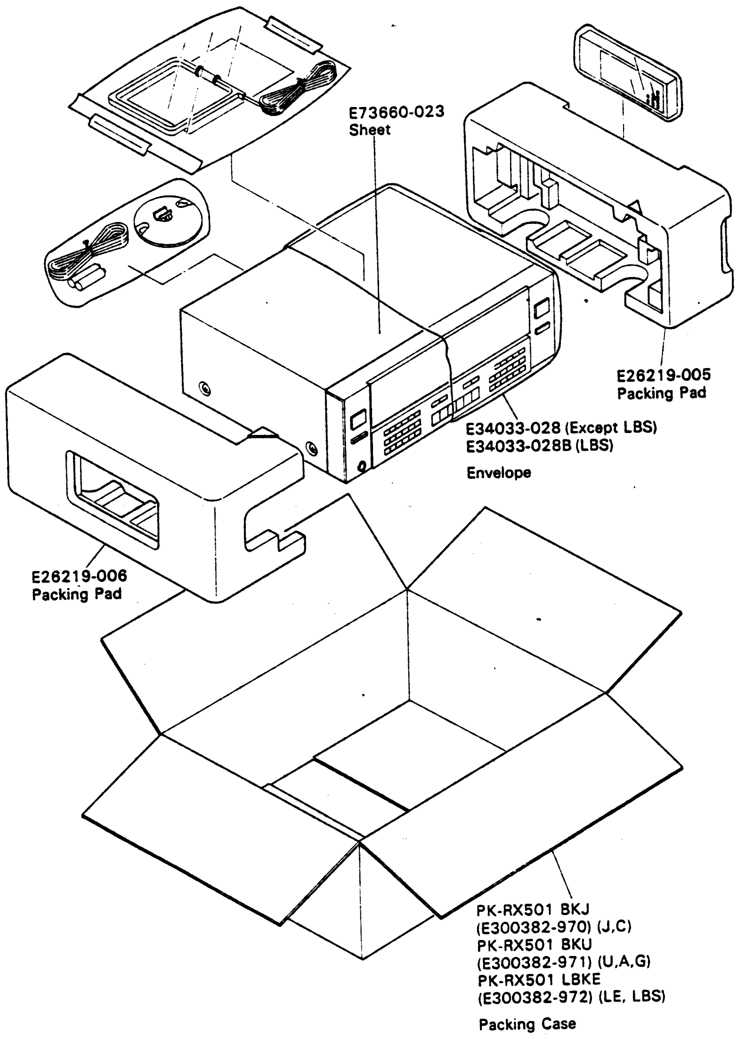
⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
		E30580-1491A	Instruction Book	1		J , C
		E30580-1492A	Instruction Book	1		Except J , C , LBS
		E30580-1492ABS	Instruction Book	1		LBS
		BT20025K	Warranty Card	1		C
		BT20048C	Warranty Card	1		J , P , PG
		BT20064A	Warranty Card	1		G
		BT20029C	Warranty Card	1	for Australia	A
		BT20060	Warranty Card	1		LBS
		BT20098	Warranty Card	1		A
		BT20066A	EEC Agency	1		G , LBS
		BT20044F	Safety Instruction Sheet	1		J
		BT20071A	Service Center List	1		C
		BT20108	Service Information	1		J , P , PG
		QZL1008-001	FTZ Information	1		G
		E43486-340A	Safety Sheet	1		LBS
		E43486-371A	Sheet	1		P , BS
		E35497-013	Caution Sheet	1	110V	P
		E35497-015	Caution Sheet	1	220V	U , PG
		E304084-001	Loop Stand	1		
		E41202-2	Envelope	2		Except LBS
		E41202-2B	Envelope	2		LBS
⚠		QMF51E2-2R0J1	Fuse	1		P
⚠		QMF51E2-4R0J1	Fuse	1		U , PG
		E67142-T2R0	Fuse Label	1		P
		E67142-T4R0	Fuse Label	1		U , PG
		QPGA005-00703	Envelope	1	for Fuse	U , P , PG
		EQB4001-012	AM Loop Antenna	1		
		EWP502-001	Built in Antenna	1		Except G
		E67007-001	Wire Antenna Assy	1		G
⚠		E04056	Siemens Pluge	1		U , PG
		UM-3(DJ)-2PSA	Battery	1		
		EMC0202-001BS	AC Plug	1		LBS
		EMZ2001-007	Adapter	1		LE
		E66416-003	Envelope	1		J
		RM-SR501U	Remote Controler	1		

⚠: Safety Parts

The Marks for Designated Areas.

J··········The U.S.A
C··········Canada
A··········Australia
G··········West Germany
LE··········Continental Europe(with LW)
LBS··········U.K.
P , PG··········U.S.Military Market
U··········Other Countries
NO mark indicates all areas.

Packing Materials and Part Numbers


E73660-023
Sheet
E26219-005
Packing Pad
E34033-028 (Except LBS)
E34033-028B (LBS)
Envelope
E26219-006
Packing Pad
PK-RX501 BKJ
(E300382-970) (J,C)
PK-RX501 BKU
(E300382-971) (U,A,G)
PK-RX501 LBKE
(E300382-972) (LE, LBS)
Packing Case

The Marks for Designated Areas.

J	The U.S.A	LE	Continental Europe(with LW)
C	Canada	LBS	U.K.
A	Australia	U	Other Countries
G	West Germany	NO mark indicates all areas.	